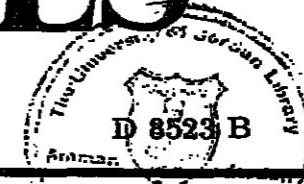


Austria	... Sch. 18	Indonesia	... Rp 7,500	Portugal	... Esc 75
Belgium	... BE 15	Japan	... Yen 1,000	Austria	... Esc 100
Canada	... C\$ 2.38	Jordan	... YD 500	Scandinavia	... SEK 110
Cape Verde	... Mts 800	Liberia	... L 500	Singapore	... S\$ 100
Denmark	... Dkr 7.75	Lebanon	... L 6,000	Slovakia	... Sk 100
Egypt	... E£ 1.70	Lithuania	... Lt 1.38	Slovenia	... Si 100
Finland	... Ft 1.70	Madagascar	... Mt 1.00	Sri Lanka	... Ru 30
France	... Ft 5.00	Morocco	... Mt 3.00	Sudan	... Sh 5.00
Germany	... DM 2.20	Niger	... Ng 1,000	Switzerland	... Fr 1.00
Hong Kong	... HK\$ 1.20	Nigeria	... N 60	Taiwan	... NT\$ 500
Iceland	... Icel 15	Papua New Guinea	... PG 100	Tunisia	... Dm 0.600
India	... Rs 1.00	Peru	... P 500	U.S.A.	... \$ 50
Iran	... Rls 500	Poland	... Zl 100	Yugoslavia	... Yd 1.00
Iraq	... Dinar 100	Russia	... Rb 100		
Ireland	... Ft 5.00	U.S.S.R.	... Rub 100		
Ivory Coast	... CFA 500				
Malta	... Mt 1.00				
Philippines	... Pes 20				
Total	... Mt 15				

FINANCIAL TIMES

EUROPE'S BUSINESS NEWSPAPER

No. 29,234



D 8523 B

Reagan's strong election hand, Page 16

NEWS SUMMARY

GENERAL

France in Chad peace initiative

France last night launched a diplomatic initiative to secure peace in Chad with the announcement that Foreign Minister Claude Cheysson would have talks in Libya at the end of the week.

Mr Cheysson starts tomorrow on an African mission that will also include the Chad capital of Ndjamena and the Ethiopian capital of Addis Ababa. Libya has been supporting the anti-government rebels.

In the last few days French forces have pushed north by more than 100 km (63 miles) the east-west "peace demarcation line" in Chad. Yesterday they were patrolling the new buffer zone. Page 18

Four die in Lebanon

A U.S. marine and three others were reported killed as anti-Government militia fought with the marines and the Lebanese Army in the southern outskirts of Beirut.

In Damascus, the Syrian foreign minister had long talks with U.S. special envoy Donald Rumsfeld on the Middle East and Lebanon. The U.S. side reported "some progress." Beirut airport closed. Page 4

Heseltine talks

Saudi Arabian Defence and Aviation Minister Prince Sultan ibn Abdulaziz and British Defence Secretary Michael Heseltine discussed military co-operation between the countries in Riyadh.

Belgian drug haul

Belgian police seized 74.5 kilograms (164 lb) of heroin, with a street value of \$12.7m, in Antwerp, and arrested 10 Chinese.

Egypt to rejoin

Egypt has accepted an invitation to rejoin the Islamic Conference Organisation, from which it was suspended in 1979 after signing the peace treaty with Israel. Page 4

Chinese satellite

China has launched its 14th experimental space satellite.

Bus crash kills 80

A bus crashed into a canal near Roopar, in the north Indian state of Punjab. Eighty people were feared killed.

40 Somalis killed

Ethiopian aircraft attacked the northern Somalia border town of Borama, killing 40 Somalis, mostly children, and injuring 80, Mogadishu radio said.

Railway reopened

Ethiopia reopened its railway to Djibouti after a mine attack by Somali guerrillas in which 23 people were killed.

Computer jallings

Six heads of Taiwan computer companies found guilty of copying Apple Computer software were each jailed for eight months in Taipei.

Pick your child's sex

Doctors at the Hadassah Hospital, Jerusalem, say they can allow parents to choose the sex of a future child by treating human sperm before it is implanted in the mother. Page 6

His 26th marriage

Glynn Scott Wolfe, 75, owner of a small Californian hotel, married for the 26th time, a record for the monogamous world. Christine Camacho, 36, is his oldest bride. He has been divorced 25 times, owes no maintenance, and has fathered 40 children.

BUSINESS

Trafalgar lines up cost-free shipyard

BY PAUL TAYLOR IN NEW YORK

ARMCO, the diversified U.S. steel and energy company, said yesterday it planned to sell its troubled domestic and international insurance business to Allianz Versicherung, the West German insurance group.

Allianz was recently outbid by Britain's RAT Industries in a takeover battle for Eagle Star Holdings, one of the UK's largest insurance groups.

Armco, which has in recent months sold other substantial assets in an effort to improve its cash position, said it had approved a letter of intent to sell the insurance business to the West German company.

The insurance units, which include 31 separate companies around the world, are part of Armco's financial services division, which includes a leasing and industrial credit business. At the end of 1982 the division had assets of \$2.33bn and Armco's equity investment in the division totalled \$75.2m.

In 1982 the division produced revenues of \$580.8m but reported a net loss of \$4.8m. Since then the results of the insurance business in particular have worsened, and last year Armco was forced to add \$180m to its reserves for insurance losses.

Last week Armco reported a fourth-quarter 1983 loss of \$46.8m. Continued on Page 18

BY JONATHAN CARR IN DAVOS

BRAZIL will probably need about \$1bn in fresh credit next year from the commercial banks, and negotiations on the loan are likely to start in the next few months.

That was made clear by Brazilian financial sources yesterday, three days after the banks signed an agreement providing Brazil with \$4.5bn in new credit this year.

The lower 1983 figure was based on the assumption that Brazil would continue to make steady progress in improving its trade balance and restoring domestic economic stability.

Speaking to businessmen at the annual symposium of the European Management Forum in Davos, the Brazilian Finance Minister, Sr Ernesto Galves, estimated that his country's trade surplus would rise to \$9bn this year after \$6.5bn in 1983.

He also believed that Brazil's

public-sector budget would be in balance by the end of the year after showing a deficit equal to 2.7 per cent of gross national product in the last few years.

Sr Galves appealed for the confidence of the world banking community. He attributed the drop in Brazil's business morale last year partly to the long period of uncertainty while the country's new credit measures were being negotiated.

Speaking separately in Davos yesterday, Mr R. T. McNamara, U.S. Deputy Secretary of the Treasury said most banks knew it would be a mistake to jeopardise the large volume of their existing credit to debtors by refusing to put up relatively small additional loans.

But Mr McNamara also said he expected "banking syndication mini-crisis" as some banks sought to pull out of international lending.

He also felt that there were three

serious threats to solving the debt problem of the developing states - protectionism, a possible resurgence of high interest rates and political price increases.

● Mexico had received commitments totalling more than \$2bn for its \$3.8bn loan from commercial bank creditors when the initial deadline for replies expired on Friday night, writes Peter Montague.

Although still short of the total, the figure shows that the pace of replies picked up substantially at the end of last week.

Argentine officials are also to meet leading bank creditors again in New York this week. One point for discussion will be Argentina's entitlement to receive a further \$150m tranche of the \$1.5bn medium-term loan negotiated with the bank by the former military government.

For private domestic units, the vacancy fell from 6 per cent at the end of 1982 to 4.7 per cent one year later. Demand was strongest for small flats.

Lex, Page 18; Hong Kong market, Page 25

U.S. hints at shift on position in nuclear arms control talks

BY REGINALD DALE, U.S. EDITOR, IN WASHINGTON

THE REAGAN Administration yesterday hinted at a shift in its position on nuclear arms control negotiations with the Soviet Union, saying that a "breakthrough" based on trade-offs could be achieved in the Geneva strategic arms reduction talks (Start) if Moscow returned to the table.

Mr Edward Rowny, the chief U.S. strategic arms negotiator, indicated after a meeting with President Ronald Reagan that the U.S. would consider any "reasonable" Soviet proposal to merge the Start talks with the parallel Geneva negotiations on intermediate range nuclear missiles (INF) - an idea that Washington has hitherto opposed.

Asked if he was signalling a new willingness to listen and talk about a merger, Mr Rowny replied: "That's a fair statement." He stressed, however, that the U.S. would not itself make such a proposal.

Moscow broke off the INF talks after the Nato deployment of American

cruise and Pershing 2 intermediate range missiles began in November, and has declined to set a date for the resumption of the Start talks.

U.S. officials, including Mr Rowny, have previously opposed Soviet suggestions that the two sets of talks be merged on the grounds that unsolved problems would only be further complicated.

Privately, administration officials have expressed concern that West European governments, which

have been closely consulted on the INF negotiations, would acquire increased influence over the strategic negotiations, the conduct of which, in the American view, should be restricted more narrowly.

He added, however, that Moscow had reacted coolly to last October's U.S. offer of a "build down," under which each side would scrap a specific number of nuclear weapons each time it deployed a new one.

He rejected as "totally groundless" Sunday's Soviet charges that the U.S. had violated existing arms agreements.

He then referred to Mr Reagan's proposal of last September that U.S. advantages in strategic bombers and cruise missiles could be traded against Soviet advantages in ballistic missiles.

Mr Rowny cited a number of Soviet moves as evidence of progress in the Start talks during the past 18 months, in which Mr Reagan's opponents have accused him of dragging his feet. Moscow had reduced the ceiling it would accept on strategic weapons, made some movement to address U.S. concerns on verification and dropped some of its own proposals that particularly troubled the U.S., Mr Rowny said.

He added, however, that Moscow had reacted coolly to last October's U.S. offer of a "build down," under which each side would scrap a specific number of nuclear weapons each time it deployed a new one.

He rejected as "totally groundless" Sunday's Soviet charges that the U.S. had violated existing arms agreements.

Our new 28-page 10th Anniversary Review tells you all about us, and precisely what we aim to do for our clients.

To receive a copy, just send the coupon, or call Freefone

Futures. It could be the start of 10 successful years for you.

InterCommodities Ltd, 3 Lloyds Avenue, London EC3B 5DT. Tel: 01-481 9827. Telex: 884962. Prestel 48150.

Please send me your new 10th Anniversary Review free and without obligation.

Name _____

Address _____

Tel: Day/Eve: _____ Telex: _____

My particular interest is: Trading Accounts

Discretionary Accounts Research & Information Technology

Signs of revival in Hong Kong property market

By Robert Cottrell in Hong Kong

HONG KONG's depressed property market is showing signs of recovery, according to preliminary government figures published yesterday. During 1983, demand for residential, commercial and factory space rose, while supply fell. Demand for office space hit a record high but was none the less outstripped by new supply coming on to the market.

Mr Raymond Fry, Hong Kong's Commissioner of Rating and Valuation, said yesterday that the trends constituted "clear signs of a revival in the property market," and indicated that end-users had been entering the market, attracted by low prices, to "fulfil their accommodation needs."

Property is a central feature of the Hong Kong economy. At the height of the recent "boom" in 1981, property assets were estimated by local stockbrokers to account for some 70 per cent of the capitalisation of the local stock market. The property "crash" of 1982, caused by oversupply coupled with political worries about Hong Kong's future, sent the stock market into a prolonged depression and bankrupted the real estate industry.

The newly published government figures confirm local perceptions of a return of interest in the local property market. Earlier this month, Everbright Industrial, a China-based company, paid HK\$1bn (\$128m) for eight blocks of flats on Hong Kong island, the largest local property deal for more than a year.

A government auction next month of a site in Hong Kong's central business district is expected to attract bids above its reserve price - a situation few analysts would have confidently predicted six months ago.

The bottoming-out of the property market is a factor in the rally, which has gathered speed on the Hong Kong stock market since the Christmas holiday season.

According to the Government, Hong Kong's domestic, commercial (mainly shops) and factory sectors saw a falling vacancy rate in 1983. Vacancy rate expresses empty property as a percentage of the total stock of property of that type.

For private domestic units, the vacancy fell from 6 per cent at the end of 1982 to 4.7 per cent one year later. Demand was strongest for small flats.

It is understood that Mr Katsui Kawamura, Nissan's chairman and previously one of the senior executives opposed to the project, will fly to London to sign an agreement with the British Government to coincide with a formal announcement in Japan.

Mr Takashi Ishihara, Nissan's president, said yesterday after attending the Japanese unions' 30th anniversary celebrations: "We ex-

Japan, U.S. sign pact on telecom sales

BY STEWART FLEMING IN WASHINGTON

THE U.S. and Japan have signed a new three-year agreement aimed at giving U.S. telecommunications companies a bigger share of the Japanese market and at opening the door for them to participate in joint research and development projects with Nippon Telegraph and Telephone (NTT), the state-owned telephone company.

The agreement was signed during a visit to Washington by Mr Shinjiro Abe, the Japanese Foreign Minister. While it will be welcome to U.S. telecommunications manufacturers, it reflects the limited progress which the U.S. and Japan are making in dealing with the trade conflicts they face.

Last Friday, the U.S. disclosed that it suffered a \$69.5bn merchandise trade deficit last year of which \$21bn was a bilateral deficit with Japan. Some economists argue that, although the U.S. economy is recovering and employment rising, the scale of the deficit and its impact



Competitiveness. Professionalism. Profitability.
The right information system can put you at the leading edge. And CPP, at the leading edge of technology, can ensure you have the right system.

Whatever your business, you'll appreciate the role of modern information and communications technology. And as a full operating subsidiary of the CAP Group, it's a factor we've seen become increasingly crucial.

It's also why over 1000 clients, from small concerns to corporate institutions in Industry, Finance, Commerce and Government, have come to rely on the CAP Group's expertise in total systems design.

With more than a thousand highly skilled staff and a wealth of specialist knowledge in software, telecommunications, computers and microelectronics, we are able to provide a very comprehensive service.

Significantly, we've delivered over 4000 projects ranging from those requiring a few man weeks to those demanding more than 100 man years!

But whether we advise, design, develop, install, train and maintain; from the chip to the total system, we at CPP make it our full responsibility to deliver complete satisfaction.

We do aim to being obsessed with Quality Assurance. But then, as much of our business comes from existing clients, we feel it's worthwhile.

What's more, we're totally independent from any hardware manufacturer. And confidentiality as well as value for money is guaranteed.

All this enables us to help you invest in technology that brings benefits today and reaps rewards tomorrow.

Isn't it time you went to the top with your computer system?

CPP Nederland
van Houten Industriepark 11, Postbus 143, 1054 AC Weesp, Nederland.
Telefoon: 02940-15441 Telex: 18634 CPPNL
CAP Group Worldwide; London, New York, Singapore and Hong Kong.

Redemption Notice

City of Oslo (Norway)

9% Sinking Fund External Loan Bonds due March 1, 1988

NOTICE IS HEREBY GIVEN, pursuant to Fiscal Agency Agreement dated as of March 1, 1976 under which the above described Bonds were issued, that Citibank, N.A., Fiscal Agent, has selected by lot for redemption on March 1, 1984 through the operation of the Sinking Fund, \$2,046,000 principal amount of said Bonds at the Sinking Fund redemption price of 100% of the principal amount thereof, together with accrued interest to the date fixed for redemption. The serial numbers of the Bonds selected by lot for redemption are as follows:

BOND NUMBERS

M2	7513	13326	14719	15407	17095	17783	18471	19159	19978	20673	22451	24288	26450	32542	33640	34328	35016	36704	36832	37060	37768	38456	39144
17	7521	13334	14727	15415	17103	17891	18479	19167	19988	20681	22459	24286	26450	32540	33640	34328	35014	36712	36840	37068	37773	38484	39152
30	7529	13334	14727	15415	17103	17891	18479	19167	19988	20681	22459	24286	26450	32540	33640	34328	35014	36712	36840	37068	37773	38484	39152
257	7537	13334	14727	15415	17103	17891	18479	19167	19988	20681	22459	24286	26450	32540	33640	34328	35014	36712	36840	37068	37773	38484	39152
269	7546	13338	14745	15421	17119	17897	18483	19162	19982	20675	22473	24287	26454	32542	33640	34328	35014	36712	36840	37068	37773	38485	39153
268	7555	13338	14745	15421	17119	17897	18483	19162	19982	20675	22473	24287	26454	32542	33640	34328	35014	36712	36840	37068	37773	38485	39153
523	7561	13374	14767	15435	17143	17898	18489	19167	19988	20681	22482	24298	26458	32546	33646	34336	35016	36714	36846	37086	37783	38496	39174
523	7561	13374	14767	15435	17143	17898	18489	19167	19988	20681	22482	24298	26458	32546	33646	34336	35016	36714	36846	37086	37783	38496	39174
367	7565	13390	14783	15421	17119	17897	18483	19162	19982	20675	22473	24287	26454	32542	33640	34328	35014	36712	36840	37068	37773	38485	39153
402	7601	13414	14807	15485	17163	17898	18493	19179	19983	20681	22480	24296	26457	32547	33640	34336	35016	36714	36846	37086	37783	38494	39173
449	7617	13417	14823	15491	17111	17909	18497	19183	19983	20682	22484	24298	26452	32542	33640	34328	35014	36712	36840	37068	37773	38484	39173
475	7626	13428	14821	15491	17107	17907	18495	19181	19981	20680	22484	24296	26452	32542	33640	34328	35014	36712	36840	37068	37773	38484	39173
508	7632	13446	14829	15493	17115	17906	18497	19182	19982	20681	22486	24298	26454	32544	33644	34328	35014	36712	36840	37068	37773	38484	39174
531	7641	13454	14847	15493	17225	17906	18498	19182	19982	20681	22486	24298	26454	32544	33644	34328	35014	36712	36840	37068	37773	38484	39174
565	7655	13454	14847	15493	17225	17906	18498	19182	19982	20681	22486	24298	26454	32544	33644	34328	35014	36712	36840	37068	37773	38484	39174
565	7655	13454	14847	15493	17225	17906	18498	19182	19982	20681	22486	24298	26454	32544	33644	34328	35014	36712	36840	37068	37773	38484	39174
617	7668	13464	14879	15479	17175	17905	18501	19183	19983	20681	22486	24298	26454	32544	33644	34328	35014	36712	36840	37068	37773	38484	39174
640	7670	13481	14887	15485	17183	17905	18501	19183	19983	20681	22486	24298	26454	32544	33644	34328	35014	36712	36840	37068	37773	38484	39174
729	7685	13484	14895	15485	17183	17905	18501	19183	19983	20681	22486	24298	26454	32544	33644	34328	35014	36712	36840	37068	37773	38484	39174
775	7697	13510	14903	15491	17111	17909	18507	19183	19983	20682	22486	24298	26454	32542	33642	34328	35014	36712	36840	37068	37773	38484	39174
810	7700	13518	14911	15491	17287	17907	18505	19181	19981	20681	22486	24298	26454	32542	33642	34328	35014	36712	36840	37068	37773	38484	39174
838	7701	13544	14919	15493	17285	17905	18505	19181	19981	20681	22486	24298	26454	32542	33642	34328	35014	36712	36840	37068	37773	38484	39174
854	7704	13544	14919	15493	17285	17905	18505	19181	19981	20681	22486	24298	26454	32542	33642	34328	35014	36712	36840	37068	37773	38484	39174
884	7705	13544	14919	15493	17285	17905	18505	19181	19981	20681	22486	24298	26454	32542	33642	34328	35014	36712	36840	37068	37773	38484	39174
902	7708	13550	14943	15493	17285	17905	18505	19181	19981	20681	22486	24298	26454	32542	33642	34328	35014	36712	36840	37068	37773	38484	39174
915	7707	13550	14943	15493	17285	17905	18505	19181	19981	20681													

EUROPEAN NEWS

UK holds last-minute steel talks on eve of EEC deadline

BY PAUL CHEESERIGHT IN BRUSSELS

THE European Community's effort to restructure its ailing steel industry reaches another turning point today as the Ten run into a deadline for the final submission to the Commission of the industrial and financial plans for national steel industries. Without Commission approval of these plans, governments cannot provide new subsidies for their industries. But subsidy programmes agreed with the Commission before today will continue.

The British Government yesterday was involved in last-minute talks with the Commission on further subsidies, independent of a new corporate plan for the British Steel Corporation (BSC).

Today's deadline springs out of agreements reached in June 1981 when the Ten agreed first to control the steel market and second to a code for the grant of subsidies for the steel companies.

This Code of Aid, as it is called in Brussels jargon, spells out the conditions under which subsidies could be granted and laid down a timetable for their elimination by the end of 1985. In 1986, the European steelmakers should be operating without subsidies, competing in a free market. The market controls come off at the end of 1985, too.

The Code links the provision of subsidies to the elimination of capacity and the achievement of financial viability by the end of 1985.

In June 1981 it was decided that, by the end of September 1982, the Ten would have to submit their restructuring plans to the Commission. By the end of June 1983, the Commission would have to give a ruling on these plans—that is, it would have to decide what level of subsidy would be appropriate in order to reach the end-1985 target.

The plans were not generally

Bonn warns would-be refugees

By Our Berlin Correspondent

BONN has warned East Germans attempting to leave the country for the West not to seek refuge inside Western embassies in East Berlin. Two groups of East Germans recently took refuge in the U.S. embassy and the West German permanent mission in East Berlin and were subsequently allowed to go to the West.

The warning, by Herr Philipp Jenninger, Chancellor Helmut Kohl's side in charge of relations with East Germany, was broadcast repeatedly to East German yesterday in West Berlin radio news bulletins.

He told the Frankfurter Allgemeine newspaper yesterday that East Germans might quickly find themselves in a "blind alley" if they came seeking refuge in Western embassies. Understandable as such actions were, "we must warn against regarding them as a safe solution and against believing one can force one's way out this way."

Herr Jenninger said that East Germans should not "mistakenly assume that Western embassies or Bonn's permanent mission could grant them political asylum." "Whether we like it or not," he said, "the East German authorities decide on exit permits in each case."

But where there is no plan, there can clearly be no Commission decision, and that is the case for Britain, France and Italy.

In these cases, subsidies being paid will have to be agreed by midnight tonight. Hence, the British flurry of talks with the Commission. The final BSC plan will not be in Whitehall until April; thus it will certainly not be in Commission hands until the summer.

So, breach of the deadline does not mean that no further subsidies can be paid, but that no fresh subsidies can be authorised.

Finsider likely to reopen Bagnoli complex soon

BY JAMES BUXTON IN ROME

FINSIDER, the Italian state steel company, expects to reopen soon the Bagnoli complex near Naples as a result of the concessions on quotas which the Government obtained in Brussels last week.

Ministers said at the weekend that Bagnoli's output this year would be low. Finsider declared yesterday that it was still evaluating how and when to reopen the plant.

There is a brand new plant costing £900m (£374m) for making flat products at Bagnoli.

Most of the complex has been closed for more than a year and Finsider has said it would only start up the new plant if Italy won higher quotas at last week's EEC Council of Ministers.

Although Italy did not formally gain any extra quota, it did get an assurance that it would be able to make use of flexibility in the quota system—by taking advantage of other producers' unused quotas—to produce a few hundred thousand tonnes of steel at Bagnoli this year. Italy is also to go to the European Court in an attempt to prove its right to an extra 350,000 tonnes of quota.

Opposite the Tuilleries, steps from the Louvre.



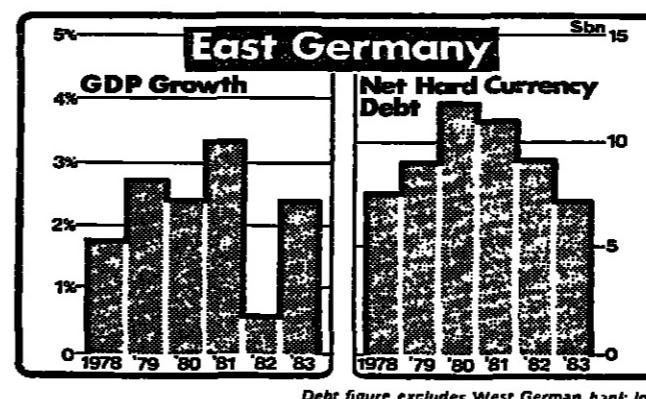
Paris might well have been designed around the famous Hotel Meurice, a landmark in every sense. You are surrounded by elegance in everything from service to settings. And ease the pressures of business travel in our spectacular yet intimate Salon de Madame Pompadour. We look forward to offering you the Inter-Continental advantage.

THE ADVANTAGE IS INTER-CONTINENTAL
HOTEL MEURICE

228 Rue de Rivoli, 75126 Paris, Telex 220673
For reservations call: London (01) 991-7181, Paris (01) 42-47-92
Frankfurt (0611) 230561, Amsterdam (020) 222121

Leslie Colitt in Berlin reports on an important change in the East German economy

How a wage tax is really a price subsidy



Germany this year to bring them further into line with international levels. Starting this month, East German agriculture has to pay the same prices as industry for energy and other purchases, while collective farms and producers with garden plots will be paid at least 15 per cent more for their crops to stimulate higher yields.

Consumers, however, do not face higher prices for basic foodstuffs, services or transport (which from next year will also pay the wage tax) or rent, which all remain at the level of the late 1980s.

This explains the sharp jump in subsidies this year, to maintain low prices for essentials.

After telling the people for years that stable prices for essential goods and services represent one of its most important achievements, the party would find it difficult to reduce the enormous consumer price subsidies. This is due to over 80 per cent of all consumer products.

East Germans question this figure, complaining of constantly rising prices for all but basic goods. There is no desire to move in the direction of Hungary's socialist market economy, however, where most prices have been freed from controls.

The introduction of the new economic system was derived from a Pravda article in 1962 by the Soviet economist, Mr Jevsei Liberman, who said profits should be the chief indicator of a state company's performance and that employees should be given bonuses based on company profitability.

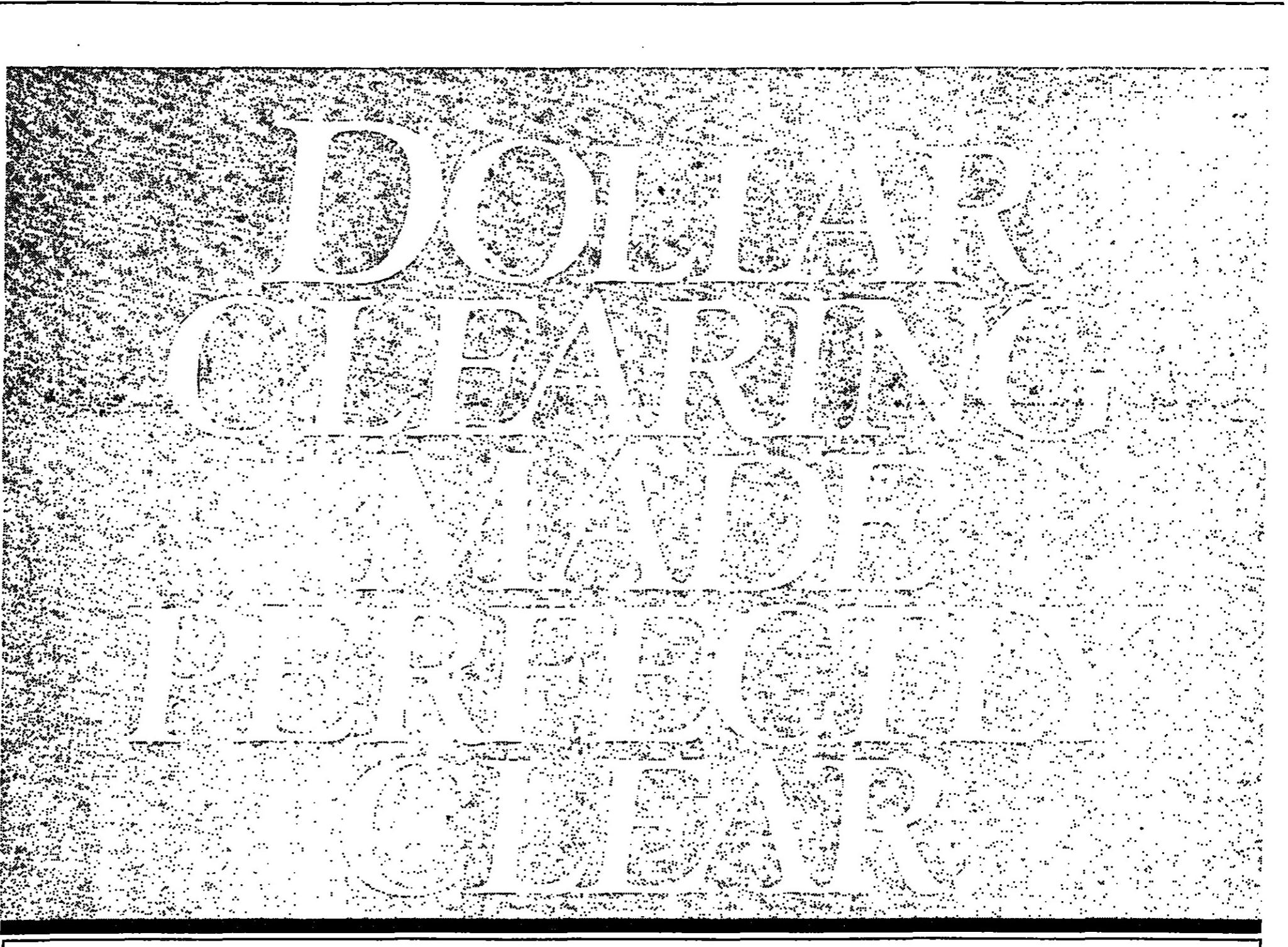
The prices which industry pays for its raw materials are again being raised in East

The more decrees issued, the more controls are needed to see that they are followed. Thus, the party has introduced a decree obliging general directors of the Kombinate—the enormous industrial trusts—to render accounts to their superior Ministry to make sure they comply with directives on saving raw materials and energy.

Until now, the highly centralised command economy has worked better in East Germany than in other Comecon countries, especially the Soviet Union. But now it is being forced on to profit East Germany into the micro-economics age and to close the 20 per cent gap in labour productivity compared with West Germany.

The country has set itself a target of 4.5 per cent growth this year, the highest among the Comecon countries. It is trying to increase exports and curb imports so that it can repay an estimated \$4bn this year on its hard currency debt of which, \$800m is owed to foreign banks, and \$1.5bn to West German banks. It must also repay its cumulative trade debt to the Soviet Union, which has soared in recent years because of higher priced Soviet energy.

The introduction of the wage tax may go some way toward improving the efficiency of East German industry. However, it is the lack of competition in the large industrial Kombinate and the absence of a profit motive which could undermine its hopes of restructuring the economy in the longer term.



Security Pacific Bank is ready to provide correspondent bankers with something they need right now. Clarity. The ability to rise above the confusion and see dollar clearing in an entirely new light.

We do it by offering something other major banks don't, a simplified account analysis. A monthly report that clearly details the type, volume and cost of all your transactions, as well as providing up-to-date historical information. And you won't have to look for hidden costs, there aren't any. Just explicit charges at very competitive rates.

That's the kind of quality service our clients have grown to expect. Our New York dollar clearing service combines years of professional experience with the latest electronic processing, communications, and reporting capabilities, along with something more, personal service.

All of our clients are assigned a personal bank officer who knows the operational and technical side of the business, and can simplify even the most complex clearing transactions.

Security Pacific invites you to contact one of our officers and discuss our dollar clearing services. We think you'll discover you can gain a clear advantage.

In London: Leif Gillbert, V.P. 01-379-7355/Security Pacific National Bank/2 Arundel St./London WC2R 3 DF/England

In New York: Francesca Laplaige, V.P. 212-883-7218/Security Pacific International Bank/(a wholly owned subsidiary of Security Pacific Bank)/245 Park Avenue/New York, NY 10167

**LOOKING FORWARD
WORLDWIDE**



© Service Mark Owned by Security Pacific Corporation. "Security Pacific" and the Security Pacific logo are registered trademarks of Security Pacific Corporation.

AMERICAN NEWS

Reagan can win by landslide, says campaign chief

BY REGINALD DALE, U.S. EDITOR IN WASHINGTON

PRESIDENT Ronald Reagan would win "in far more of a rout" than in 1980 if the U.S. Presidential elections were held now, but the contest will become much closer as the November election date draws nearer, Mr Edward Rollins, Mr Reagan's campaign director, said yesterday.

Mr Rollins, speaking only hours after Mr Reagan formally announced his candidacy for a second term in the White House, said that the President was now easily ahead in 45 or 46 of the 50 states, assuming that his challenger would be former Vice-President Walter Mondale, the Democratic front-runner. Mr Reagan carried 44 states in 1980.

"My assumption is that Ronald Reagan will win by landslide," Mr Rollins said. He conceded, however, that Mr Mondale could win in a very close election "if everything went wrong" for the Republicans.

Mr Reagan himself declined to forecast whether he would win re-election, saying he was superstitious about predictions. He said that he would be willing to debate with his Democratic opponent, but that it was too early to say anything.

Feature, Page 16

Productivity growth in U.S. slows sharply

BY STEWART FLEMING IN WASHINGTON AND TERRY DODSWORTH IN NEW YORK

THE GROWTH in productivity in the U.S. which has been an important factor behind last year's modest inflation rate of just under 4 per cent, slowed sharply in the fourth quarter, the Labour Department said yesterday.

Non-farm business productivity increased by 1 per cent in the October-December period as a result of a 6 per cent increase in output and a 5 per cent rise in hours worked. In the third quarter, productivity rose 2.5 per cent.

For the year as a whole there was a 3.1 per cent rise in non-farm business productivity.

1984 has heralded a spate of unexpected strikes in South Africa

Black workers raise their fists

BY BERNARD SIMON IN JOHANNESBURG

NINETEEN EIGHTY-FOUR was expected to be a calm year on the labour front in South Africa. With the economy in deep recession, unemployment mounting and managers in no mood for concessions, it was widely assumed that the fast-growing band of black trade unions would not risk a major confrontation. Black workers were thought unlikely to put their jobs at stake by going on strike.

Yet the year has begun with a rash of strikes unmatched since the labour reforms in late 1970s began to bring black workers into the mainstream of African employment procedures. Two weeks ago at least 20,000 workers downed tools in plants ranging from BMW's motor assembly line to the Impala platinum refinery and several supermarket chains.

The biggest stoppage, which was also the first legal strike by blacks simultaneously in several plants around the country, involved 8,600 employees of AECI, South Africa's biggest chemicals producer in which ICI is a large shareholder.

The incidents were by no means isolated. BMW closed its factory north of Pretoria last week when 1,300 workers went on strike a second time, and at least a third of the workforce at a vanadium mine owned by Union Carbide also walked off their jobs.

Mr Reginald Hofmeyr, industrial relations director of Barlow Rand, the country's largest industrial group, now agrees that 1984 "is going to

be extremely lively from the industrial relations point of view." He adds: "It may get worse when the economy really picks up—in other words, in 1985."

With hindsight, the present spate of stoppages is not so surprising. Although official figures point to a decline in strike action last year (from 384 in 1982 to 220 in the first 11 months of 1983), industrial relations men suspect that many have not been reported.

One AECI factory alone was hit by 20 stoppages in the first part of last year as new, compelling standards in the chemical industry gradually began flexing their muscles.

Paradoxically, the recession is a direct cause of much of the unrest. Black families are being squeezed by a combination of lower wage increases, retrenchments, the drought in rural areas and remorseless double digit inflation. Each breadwinner is having to support a growing number of dependants on a pay packet with shrinking buying power. According to a recent study by Mr Charles Simkins, a respected labour economist at the University of Cape Town, black living standards declined by 4.4 per cent in the year to May 1983.

Workers' hopes of an improvement in wages have been buoyed for the past year by widely-publicised forecasts of an imminent economic upturn and by extravagant trade union promises. Just three weeks before Ford's local subsidiary laid off 450 workers earlier this

month, it enthused in its in-house magazine that "the year ahead offers the opportunity for even more excitement and higher rewards."

Now that Christmas bonuses have been paid, workers' patience is wearing thin. Mrs Chris Bonner, an organiser for the Chemical and Allied Workers Union, observes that "holding back has not produced any results." Strikers appear to feel that they have as much to gain as to lose.

The stoppages are of less concern to many employers, however, than the realisation that black trade unions are turning out to be more active and less accommodating than they had hoped. Having allowed black unions to flourish since they were first legally recognised in 1978, many employers feel let down now that the unions are not playing the game.

Barlow Rand signed recognition agreements with 42 unions in the three years to last September. But its metal and engineering subsidiaries were hit by 10 strikes in the space of six weeks last year. The group's chairman, Mr Mike Rosenthal, complained in his last annual review that "the conflict between private enterprise and some of the union groupings is unfortunately very basic indeed."

Instead of sticking to wages and other narrow shopfloor issues, many unions believe they have a mandate to press for improvements over a much broader front.

Their impatience is summed up by Mr David Sebabi, general secretary of the Metal and Allied Workers Union (Mawu) which has made some of the most spectacular advances in recent years. Some employers, he says, "take everything from a legal point of view. That's meaningless to workers."

Employers' fears in the late 1970s that unions would become an important channel for blacks' political grievances are becoming a reality. Several unions spoke out last year against the Government's plans for a new constitution. They are now actively lobbying against changes in the tax system which would pit blacks on the same tax footings as whites.

Although that will mean the removal of one brick from the wall of apartheid, unions say that blacks were not consulted about the changes. They are seizing the opportunity to point out the injustice of taxation without representation.

The temperature has been further raised by the increasingly tough line taken by employers. Most of the recent major disputes have ended either with dismissals or threats of dismissal. In the AECI case, workers were threatened with dismissal, despite the fact that they had followed all the arbitration procedures laid down by law.

The company says that it decided on that course of action to minimise both its own and the chemical union's losses.

Nonetheless, it showed that when the chips are down, management still holds all the trump cards.

THE Australian Labor Government that won power last March is embarking on its first significant battle of wills with a major industry. This arises from its determination to introduce a resources rent tax (RRT) in the petroleum industry in time for the 1984-85 financial year.

The introduction of an RRT has been official policy of the Labor Party since 1977, though for now the Government is to concentrate only on the oil sector.

Australia is one of only five OECD countries which are net

energy exporters and it has the capacity to expand its energy surplus greatly. At present, it exports only a tiny amount of crude. But 1983 was a good year for oil exploration with the oil and gas sector boosted by numerous significant finds, such as Broken Hill Proprietary's discovery of a worthwhile oil field in the Timor Sea, off northern Australia.

Broadly, Labor maintains that tax should be paid on the "economic rent" derived from mineral exploitation. The "rent" being regarded as the profit that

is left after deduction of all expenses, plus an amount equivalent to the minimum return necessary to encourage investment in new projects.

Senator Peter Walsh, the Minister for Resources and Energy, says that at present, federal and state governments place heavy demands on the resources sector through "a hotch-potch of royalties, charges, and other imposts," many of them falling on companies which are only marginal producers, and bearing no relation to the profitability of specific projects.

The key features of the rent tax are these:

- It will replace existing taxes and royalties on all petroleum resources (crude oil, condensate, LPG, and natural gas).
- It will not be an additional tax.
- It will be a project tax, not a company tax.
- It will not be applied until a project's cash flow is positive.
- It is until aggregate net earnings are in excess of total investment.
- It will be levied before company tax, and form a deduction from the company tax base.

The eight are facing the worst famine since the drought of 1972, with an estimated food deficit of some 1.5m tonnes, according to the Permanent Committee for Drought Control in the Sahel (CILSS), which is organising the meeting.

Four civilians and three

The worst-hit states in the region, along the southern fringes of the Sahara desert, are Chad, Mauritania, Mali and Senegal. Other members of the group are Cape Verde, Gambia, Niger and Upper Volta.

Maize crop hit—Page 28

Money-supply watchers suspect that changes in reserve requirements may have little effect on the Fed

It's Thursday, not Friday, but the rest is uncertain

AN INNOVATION in the techniques the Federal Reserve Board uses to define U.S. monetary policy, which many economists insist is an essential ingredient in controlling the money supply, comes into effect

which is now being dismantled. Individual banks are required to keep interest-free reserves with the Fed on the grounds that those reserves constrain their freedom to increase loans and so multiply deposits in the banking system as the loans are taken up. The theory is disputed, but it remains a cornerstone of monetary policy not only in the U.S. but also in West Germany, for example.

In the U.S., the basic requirement for transactions accounts is that banks must put aside reserves at the Fed equivalent to 12 per cent of their deposit liabilities. Since 1968 the banks (and other financial institutions such as savings banks) to which reserve requirements apply) have been able to build up their deposits in one week, but have had to put aside the extra reserves to cover these deposits only after two weeks.

In the 1970s monetarist economists rounded on the system of managing an important element of the monetary base, saying that it allowed the banks to defer modifying its operating procedures in the light of the change is likely to be one of the topics for discussion at this week's important two-day meeting of the central bank's monetary policy making arm, the Open Market Committee, which started yesterday.

Although CRR is an innovation in today's financial landscape, it was the rule at the Fed until 1988 when it was replaced by the Larger Reserve Requirements (LRR) system

native but to supply them with the reserves to cover these deposits on the day that the reserve requirements had to be lodged with the twelve regional Fed banks, thus weakening its ability to control the money supply.

CRR comes into effect on Thursday. It is a complex change which has been

after the end of the period. (A modified lagged system remains in effect for non-transactions accounts and Eurodollars).

In theory, what could happen now with CRR is that if the banking system finds its deposit base rising, it will have to take fast action either to beef up its reserves or alter its deposit mix. The Fed can also react

to ensure that it does not result in unwanted shortages of reserves, which might create the impression that it is tightening its monetary policy.

Some practical changes will also occur. One is that the money supply figures, although still published weekly, will again be released on Thursday each week at 4.15 pm instead of on Friday. Money market economists suggest that the switch to Friday, after years of failure to have the desired effect of reducing the attention that the financial markets give to the figures.

Beyond such practical changes to the way of the switch to CRR is uncertain. Salomon Brothers' suggests for example that partly because of the longer reserve maintenance period, the change will make Fed open market interventions into the money market less frequent and less easy to interpret.

The real test, however, is expected if and when the Fed goes back to putting greater emphasis on M1 in its conduct of monetary policy. This makes, at that time, could depend on how they are implemented. "To make interest rates more volatile again,"

"the Federal Reserve's new system of contemporary reserve requirements," Salomon Brothers, New York Plaza, New York 10004, USA.

The Contemporary system is unlikely to usher in a new era of policy, writes Stewart Fleming in Washington. But it will cause the money supply figures to be released earlier in the week.

Explained in more detail than

can be attempted here by two economists on Wall Street, economists are suggesting that major changes are not to be expected for the time being. They make the point that although the Fed in 1979 switched to focusing on bank reserves rather than interest rates will result in an increase in reserve demands for reserves.

Economists are suggesting that many maintain the parts responsible for the extreme interest rate volatility during 1980 and 1981 (U.S. interest rates have now been very stable for several months), the shift to CRR will not go unnoticed.

It creates a new range of uncertainties for both the banks and the Fed about the likely demand for reserves and for the banks, the cost of these reserves.

It is anticipated that for a while the uncertainty will result in an increase in reserve demands as the banks play safe.

Although the Fed has

attempted to offset the uncer-

tainty in the changeover period

by increasing the freedom of

banks to "carry over" reserves

from one reserve maintenance

period of two weeks to the next,

the real test is arriving in the central bank will also play

a role in the transition period.

They think that the Fed will try

more rapidly to changing

demands for reserves.

Economists on Wall Street,

however, are suggesting that

many maintain the parts re-

sponsible for the extreme

interest rate volatility during

1980 and 1981 (U.S. interest

rates have now been very stable for several months), the shift to CRR will not go unnoticed.

It creates a new range of un-

certainties for both the banks

and the Fed about the likely

demand for reserves and for the

banks, the cost of these reserves.

It is anticipated that for a

while the uncertainty will re-

sult in an increase in reserve

demands as the banks play safe.

Although the Fed has

attempted to offset the uncer-

tainty in the changeover period

by increasing the freedom of

banks to "carry over" reserves

from one reserve maintenance

period of two weeks to the next,

the real test is arriving in the

central bank will also play

a role in the transition period.

They think that the Fed will try

more rapidly to changing

demands for reserves.

Economists on Wall Street,

however, are suggesting that

many maintain the parts re-

sponsible for the extreme

interest rate volatility during

1980 and 1981 (U.S. interest

rates have now been very stable for several months), the shift to CRR will not go unnoticed.

It creates a new range of un-

certainties for both the banks

and the Fed about the likely

demand for reserves and for the

banks, the cost of these reserves.

It is anticipated that for a

while the uncertainty will re-

sult in an increase in reserve

demands as the banks play safe.</p

TO ENCOURAGE SMALL EXPORTERS WE'RE HAPPY TO TAKE ONE PROBLEM OFF THEIR HANDS.



It's all too easy to get a bad case of burnt fingers when you're a small exporter.

Not only are you more likely to be dealing with unknown customers in unknown markets.

You're also more likely to be uninsured.

In fact, the small exporter trying to become a larger exporter is often in a perfect 'Catch 22' situation.

He can't really afford the risks of selling more overseas without taking out insurance.

But he can't really afford the time or the staff to handle the paperwork and problems of insurance until he's already selling a lot more overseas.

It's a problem that does little to inspire our business-men to rush round the world with order books.

So it's a problem we're particularly pleased to have solved.

We'll take the risks, you just take the orders.

Our answer is known as the Smaller Exports Scheme.

And it's a simple, inexpensive way to make sure that as your goods flow out of the country, money flows into your bank account.

Here's how it works:

Once you've joined the scheme, every time you're about to send off a consignment you sign a simple form and send us your export documents.

In return, we'll immediately pay you the full invoice value, less our fee and interest charge.

So long as you fulfil your delivery and contractual obligations, that's all there is to it.

It's our problem if your customer fails to pay. Not yours.

(In fact, by bringing together a number of smaller exporters like yourself, we're able to protect ourselves with our own ECGD cover.)

While you help the country's balance of payments, we'll help yours.

By now, you're probably thinking there must be a catch somewhere.

Are the charges going to prove too expensive or the conditions too onerous?

We don't believe so.

Certainly, joining the scheme isn't difficult.

If your export turnover is under £500,000, your shipments less than £50,000 and you can fulfil a few other simple conditions, any Barclays Bank manager will be happy to enrol you in the scheme.

And, of course, explain in more detail just how increasing your flow of export orders needn't play havoc with your cash flow.

So if you'd like to know more about our Smaller Exports Scheme, contact your local Barclays Bank manager.

Or if you'd prefer, post us the coupon below.

Let me know how I can export more without putting my company's finances at risk.

Name _____

Company _____

Address _____

To: Mr. Paul Tompkins, Barclays Export Services Limited,
168 Fenchurch Street, London EC3P 3HP.



BARCLAYS

SMALLER EXPORTS SCHEME

WORLD TRADE NEWS

Champagne exports rise 13%

By David Marsh in Paris
“PEOPLE ARE drinking because they want to forget about the economy,” says with a smile a leading executive at Moët-Hennessy, France’s leading champagne house.

Whatever the reason, French sales of champagne braved the domestic recession last year to rise by 7 per cent — while bottles of bubbly sold abroad popped up by 13 per cent, thanks above all to sharply higher demand in Britain, the U.S. and Germany.

The corking performance — which followed four years of progressive sales decline — is ascribed by champagne specialists to the good harvests of 1982 and 1983, stable prices and the spurt of demand on export markets.

Overall bottles sold last year, at around 158m (up from 146m in 1982) however were still a long way short of the record total of 186m in 1978.

Domestic sales — which account for about 70 per cent of international consumption, the same as five years ago — totalled 105.8m bottles, against exports of 49.6m.

Last year’s French sales succeeded in just creeping above the 109.4m sold in 1981, the year President Mitterrand came to power.

Demand from thirsty drinkers last year was led by Britain, where consumption rose 30 per cent to just over 10m bottles. In the U.S., sales rose 37 per cent to 9.7m bottles, while German trade — perhaps linked to Chancellor Kohl’s election victory — increased by a whopping 46 per cent to 5.3m.

Sweden backs credit for Kenya plant

STOCKHOLM. Sweden’s Government announced last week it had approved a special export credit worth SKr 300m (£26m) for Skanska Cementgjuteriet (SCG), a Swedish construction company, to build a power plant in Kenya.

SCG, in co-operation with the Foundation Company of Canada, in which it has a 39 per cent stake, has won four contracts involving the construction of the power station and the building of an adjoining permanent residential area.

The credit facility is the largest the Government has approved so far for a project in a developing country. It is expected to lead to possible Swedish exports of goods and services totalling SKr 205m.

AP-DJ

Work to be resumed on N-plant

By Leslie Collier in Berlin

“PEOPLE ARE drinking because they want to forget about the economy,” says with a smile a leading executive at Moët-Hennessy, France’s leading champagne house.

Whatever the reason, French sales of champagne braved the domestic recession last year to rise by 7 per cent — while bottles of bubbly sold abroad popped up by 13 per cent, thanks above all to sharply higher demand in Britain, the U.S. and Germany.

The corking performance — which followed four years of progressive sales decline — is ascribed by champagne specialists to the good harvests of 1982 and 1983, stable prices and the spurt of demand on export markets.

Overall bottles sold last year, at around 158m (up from 146m in 1982) however were still a long way short of the record total of 186m in 1978.

Domestic sales — which account for about 70 per cent of international consumption, the same as five years ago — totalled 105.8m bottles, against exports of 49.6m.

Last year’s French sales succeeded in just creeping above the 109.4m sold in 1981, the year President Mitterrand came to power.

Demand from thirsty drinkers last year was led by Britain, where consumption rose 30 per cent to just over 10m bottles. In the U.S., sales rose 37 per cent to 9.7m bottles, while German trade — perhaps linked to Chancellor Kohl’s election victory — increased by a whopping 46 per cent to 5.3m.

Japan’s vehicle exports up 1.4% last year

TOKYO — Japan exported 5,668,510 passenger cars, trucks and buses in 1983, up 1.4 per cent from a year earlier, while imports of new cars, the industry officials said yesterday.

The modest export increase followed a 7.8 per cent decline in 1982 from a record annual high of 6,048,447 vehicles in 1981, the annual report of the Japan Automobile Manufacturers Association said.

The Association attributed the 1983 rise to increased demand for new cars in the U.S. and Western Europe following economic recovery.

The exports consisted of 3,806,396 passenger cars, up 1 per cent from 1982, 1,822,428 trucks, up 2.8 per cent, and 40,685 buses, down 13.3 per cent, the official said.

The U.S. was the biggest importer, with 2,234,375 vehicles, or 37.7 per cent of Japan’s total exports. They included 1,697,852 passenger cars, up 0.4 per cent from 1982, 536,477 trucks, up 29.7 per cent, and 46 buses, the official said.

AP

Nancy Dunne reports on Washington’s attempt to extend extra-territorial sanctions

Uncertain future for the U.S. export act

“I’m proposing, as part of the Act, that we set up armed guards at every toy store in our area to make sure that no Soviet agent sneaks in and buys Speck n’ Spell.”

Although he was speaking tongue-in-cheek, Senator Paul Tsongas illustrates one end of the wide spectrum of Congressional thought on the future of the export Administration Act (EEA), which governs U.S. export controls. Of the 80 odd provisions contained in the House and Senate draft bills of a revised EEA, just 20 are similar.

It will only be through a mammoth compromise that a Bill acceptable to the President emerges from a congressional conference committee by February 29, when the old legislation, now extended twice, is next due to expire. In fact, so much time in the new EEA is attributable to the Administration that the President is said to prefer a permanent extension of the current Act.

It is the EEA which gave him the authority to impose extra-territorial sanctions in a controversial and futile attempt to stop equipment sales for the Siberian gas pipeline project. The school of thought held by Senator Tsongas and most of the business community is that U.S. export controls are cumbersome, inconsistent and unnecessarily

rigid. Worst of all, they have failed to prevent the transfer of technology to Communist countries.

However, most of the legislation, they contend, has occurred through illegal activities such as espionage and theft, which the EEA does not address. In fact, they say, export controls have weakened the U.S. by frustrating the efforts of American business to compete in the international marketplace.

Reagan Administration hard-liners, on the other hand, argue that “a virtual haemorrhage of strategic technology to the Soviet bloc” can only stem by tighter controls. They want the power to impose import curbs on foreign companies which violate multilateral export control rules.

To buttress its case for more control, the Administration gave wide publicity to an incident which occurred when the Commerce Department approved the shipment of a highly sophisticated computer system to an overseas company already under investigation and controlled by a man under indictment for violating U.S. export laws. The computer was seized minutes before it was to be shipped to the Soviet Union via Sweden.

The “near-miss” produced:

- New calls for a stronger role

by the Defence Department in controlling the flow of high-technology exports, now monitored principally by the Commerce Department;

● An agreement between the Commerce Department and the Customs Service, designating Customs as the liaison agency with foreign governments rather than Commerce; and,

● New, toughened regulations, proposed by the Commerce Department, limiting the use of multiple sales licenses granted to U.S. exporters of high-technology products to non-Communist nations, which will add to the burden of U.S. exporters.

Thus far, the House of Representatives, in a Bill passed last year, agreed to bar the use of extraterritorial controls applied to foreign policy reasons, and it relaxed national security controls.

The last proposal is expected to produce fireworks among both exporters and U.S. trading partners. Eliminating the use of multiple licenses could place an impossible burden on the already overstrained resources of Commerce’s Office of Export Administration. The number of single application licenses issued could rise from 95,000 last year to 1m, according to some estimates, seriously delaying applications.

It is widely agreed in Washington that commerce must issue the new proposals to head off attempts by the Pentagon and Customs service to get additional authority over export controls in the EEA. The Commerce Department, which is more sympathetic to business interests, fears being reduced to a paper-shuffling operation to process only licence applications.

The rules would add new extraterritorial dimensions to export control, requiring importers of U.S. products to provide Washington with information about their customers. With various interests pulling in different directions, the shape of the final EEA, if it emerges at all, is unpredictable.

India plans \$2bn orders for airlines

INDIAN AIRLINES and Air-India are expected to spend over \$2bn in the next ten years on new aircraft, Reuter reports from New Delhi.

Indian Airlines, managing director Kamini Chaddha, told a news conference an official committee had considered the Boeing 757, the Airbus A300-B4, the Airbus A310 and Boeing 767, among the possible aircraft that the two airlines could buy.

Both houses are expected to call for the strengthening of Cocom controls and a demand for liberalisation of controls on products available to Comeconists in other Western nations.

“The problem,” says Mr Richard Perle, assistant secretary of state of international security policy, “is coming to grips with the trade-offs that have to be made and who’s going to make those trade-offs. He believes “it is better wrongly to control than wrongly to licence.”

This attitude towards trade losses infuriates the business community which says that the need to improve its export performance has never been more critical, and that the “insurance factor” of export controls means a dangerous loss of important U.S. markets.

Japanese win MRT contract

By Chris Sherwell in Singapore

A CONSORTIUM linking the three Japanese electrical giants Hitachi, Mitsubishi and Toshiba has won a contract worth \$580m (£19.4m) to design, supply and install the air conditioning and ventilation system in Singapore’s Mass Rapid Transit (MRT) metro system.

The MRT Corporation said in an announcement yesterday that MRT Consortium had beaten five competing contractors through the quality of its design with its strong emphasis on safety and “an extremely attractive U.S. dollars financing package through which the effective cost of the contract was reduced substantially.”

It also urged Guyana and Jamaica, which recently devalued their currencies, to take a special effort to buy more goods from Caribbean trading partners. Mr St John told a news conference.

The minister said the group had held two days of very frank discussions.

Reuter

How to drive a car on sugarcane.



Take ordinary baker’s yeast, add it to extracted sugar juice, and leave it to ferment. The result is ethyl alcohol. The residue fibre, left after sugar extraction, is used to raise energy for the entire process.

100 years ago Henry Ford designed his first car to run on ethyl alcohol. However, since gasoline was cheap and easy to produce, alcohol was “forgotten” as an automobile fuel.

Alfa-Laval, leaders in biotechnology, have found a new way to produce ethyl alcohol.

Known as Biostil, it is a closed process —

energy saving and easy on the environment. It’s being put to work in Brazil, a country which has quickly established itself as the world’s leading producer of “green gas” — automobile fuel made from agricultural products.

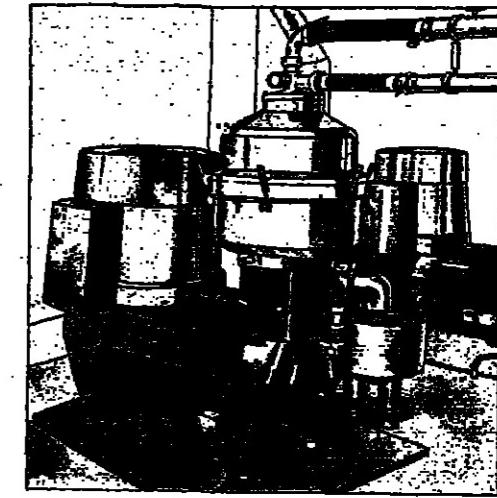
In fact, by 1985 Brazil will have a million cars running on green gas — produced primarily from the country’s gigantic sugarcane plantations.

Crucial to this programme are Alfa-Laval’s yeast separators and heat exchangers. And not just in Brazil, but in plants throughout the world where ethyl alcohol is being produced.

Devising a way to drive a car on sugarcane is typical of our innovative way of solving problems: all over the world we are finding new applications for well-proven Alfa-Laval product lines.

Ultimately, our aim is this: to find environmentally safe and cost effective ways of supplying the world’s food and energy needs. This, we feel, is potentially the world’s next major growth area.

In other words, we are creating new markets from great ideas.



The Growing World of Alfa-Laval

Alfa-Laval employs 18,000 people in 35 countries and its annual turnover of US\$1,100 million (a 13% increase over 1981) represents 10 consecutive years of growth. 87% of this turnover was derived from sales outside Sweden. Over the past five years, dividend growth rate has averaged 11.1%. Today Alfa-Laval’s products and processes are solving problems in 125 countries and in over 170 industries — from energy production, environmental control and food processing to resource recovery, agriculture and chemical engineering.

OX ALFA-LAVAL

Europe • Americas • Middle East • Africa • Asia • Australia

Creating new markets from great ideas.

For a closer look at the world of Alfa-Laval, please write to:
Public Affairs Group Staff, Alfa-Laval AB, PO Box 500, S-147 00 Tumba, Sweden.

ALFALAVAL

India plan
\$2bn order
for airline



It's automated clearing in New York. When you send messages to us electronically, your U.S. dollar payments are processed by Manufacturers Hanover and sent to the U.S. payments system with no manual intervention, virtually error-free.

THE FINANCIAL SOURCESM

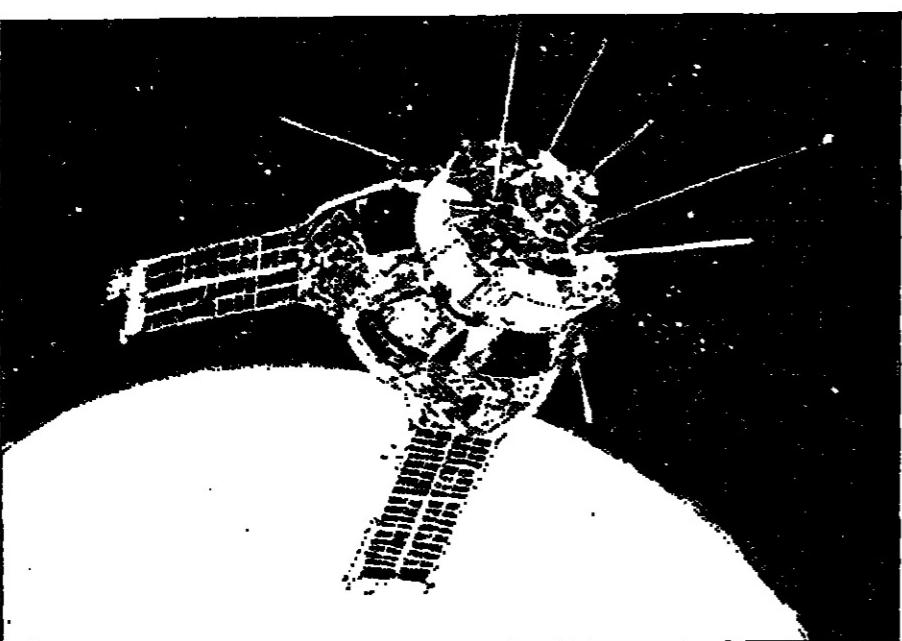
It's Manufacturers Hanover,
clearing bank to the world.



It's a direct S.W.I.F.T. link for account inquiries and adjustments. Through this direct S.W.I.F.T. link, your requests are handled quickly and efficiently. If additional assistance is needed, our representatives are on-the-spot in London to give you personal attention.



It's timely cash flow information. Our on-line reporting capability ensures that you have up-to-the-minute transaction details on your account with us in New York.



It's the most advanced telecommunications capabilities available today. We offer state-of-the-art S.W.I.F.T. capabilities, in addition to our sophisticated private telecommunications system, ensuring utmost speed and accuracy in transaction processing, account inquiries and information retrieval.

Quality. Loyalty. Consistency. These three attributes make Manufacturers Hanover a dedicated banking partner.

We are committed to providing you with high quality banking services and products—in a timely, accurate way.

But more important is the way we provide these services.

We strive, always, for a consistency that you can count on. And a loyalty you will find exceedingly difficult to match.

MANUFACTURERS HANOVER

International Banking Group

Manufacturers Hanover Trust Company
Member FDIC

New York Headquarters: 270 Park Avenue, New York, NY 10017
In London, contact: Denis A. Pearce, Vice President • 7 Princes Street, EC2P 2LR, London • Telephone: 01-600-5666 • Telex: 898-371

UK NEWS

Unions may offer safeguard to prevent security centre ban

BY PHILIP BASSETT, LABOUR CORRESPONDENT

UNION LEADERS yesterday made clear to the Government that they were ready to examine measures to safeguard security at the top secret radio monitoring centre at Cheltenham.

Civil Service union officials, accompanied by Mr Len Murray, general secretary of the Trades Union Congress (TUC), are meeting Mrs Margaret Thatcher, Prime Minister, in London tomorrow to discuss a ban on union membership at the centre.

The Government believes the ban is necessary for reasons of national security, and wants to prevent a repetition of industrial action which in the past has disrupted work at Cheltenham. Employees have been offered £1,000 as compensation for giving up all trade union rights.

Indications in Whitehall last night were that Mrs Thatcher had no intention of allowing the meeting to become a negotiating session.

Left-wing members of the TUC's finance and general purposes committee were yesterday angered at suggestions that workers at the centre might agree to a no-strike agreement as a way round the ban.



Mr Murray: 'onslaught on union rights'

Mr Murray said there had been an unprincipled onslaught on basic trade union and human rights which is of the utmost gravity to the trade union movement as a whole.

The TUC committee was concerned that if the Government's move went unchallenged there would be a danger to the rights of many other workers in security areas, in both the private and public sectors.

Times in fresh bid to settle strike

TALKS between the management of Times Newspapers in London and leaders of the print union Sogat 82 start today with neither side optimistic about a quick breakthrough.

The dispute over the re-allocation of managerial duties in the papers' library has stopped production of both The Times and the Sunday Times since Friday of last week.

The board of Times Newspapers yesterday rejected an offer of talks at the consolidation service acts, in favour of a face-to-face meeting with union representatives at the offices of the Newspaper Publishers Association.

About 1,400 employees have now been dismissed or "stood down" without pay, but Mr Arthur Britten, the Times corporate affairs director, said that there were no plans to issue notices to other employees.

The Times has now lost nearly £1m as a result of the dispute and says that both titles are now in jeopardy.

The clerical chapel (office branch) yesterday solidly backed a continuation of the dispute, although some members of the Sogat production chapels have been hostile to the strike, and did not support action last week which led to the shutdown.

• MINERS would have lost £80m in wages if their overtime ban, called over a pay dispute, continued until the end of the coal board's financial year in March. Mr Peter Walker, Energy Secretary, said yesterday in the House of Commons: "The ban started 13 weeks ago."

• RECEIVERS running the Terex construction machinery company at Glasgow have announced a further 400 redundancies. They bring to 1,880 the number of jobs lost since November when Terex, part of the now defunct IBH Holdings of West Germany, went into receivership. Progress had been made in finding a buyer for some of the company's assets, a statement said.

• E-SYSTEMS, of Dallas, Texas, the world's largest manufacturer of electronic warfare systems, has been given a listing on the London Stock Exchange. Dealings in the shares starts today. Mr John Dixon, chairman, said the London listing would help in the possible acquisition of UK companies.

Hodge bank applies for shares listing

BY ALISON HOGAN

COMMERCIAL Bank of Wales, which was founded by Sir Julian Hodge in 1971, has applied to the London Stock Exchange for a listing of its shares planned for April.

We are fulfilling a promise we made to our shareholders in 1971 that we would seek a quotation at the earliest opportunity," Sir Julian said yesterday.

Commercial Bank of Wales has some 5,400 shareholders. Sir Julian holds around 25 per cent of the equity and First National Bank of Chicago holds a further 20 per cent.

Sir Julian said the delay in the bank coming to the market was due first to the "financial holocaust of 1974-75 when the name of the game was survival".

Then, in 1981, the Bank of England refused full banking status to the Commercial Bank of Wales under the 1979 Banking Act. Sir Julian

appealed against the decision and in 1983 the bank was granted full recognition.

Mr Malcolm Thomas, chief executive, said: "One of the principle problems in gaining recognition was our lack of provision of finance for foreign trade, a side of the business we have now built up. We are operating from a much more stable base than we were four or five years ago."

The bank made pre-tax profits of £716,000 in 1982, pulled down by "a bad debt in Jersey and a lean year for investment credit" according to Mr Thomas.

The lifting of hire purchase controls and a lowering of interest rates resulted in a good upturn in business" in 1983 which helped towards an 85 per cent increase in pre-tax profits to £1.33m in 1983.

LIFE ASSURANCE AND FINANCIAL PLANNING

for the professional adviser

NEW 1984 EDITION

PUBLISHED BY FINANCIAL TIMES BUSINESS PUBLISHING

Now a thoroughly revised edition of this popular text is available, updated to take account of all changes in legislation since the first edition. All the features of the first edition have been retained and new material has been added so that this is still the most comprehensive guide to life assurance and financial planning available.

- * NEW sections on:
inheritance trusts
capital and income bonds
second hand bonds
school fees
sterling deposit funds
- * The constituents of a life policy and the essential ingredients that make up the contract.
- * NEW chapter on the basics of income tax and capital gains tax, incorporating information on social security benefits.

Detailed chapters deal with the application of life assurance, the tax problems and all the various aspects of:

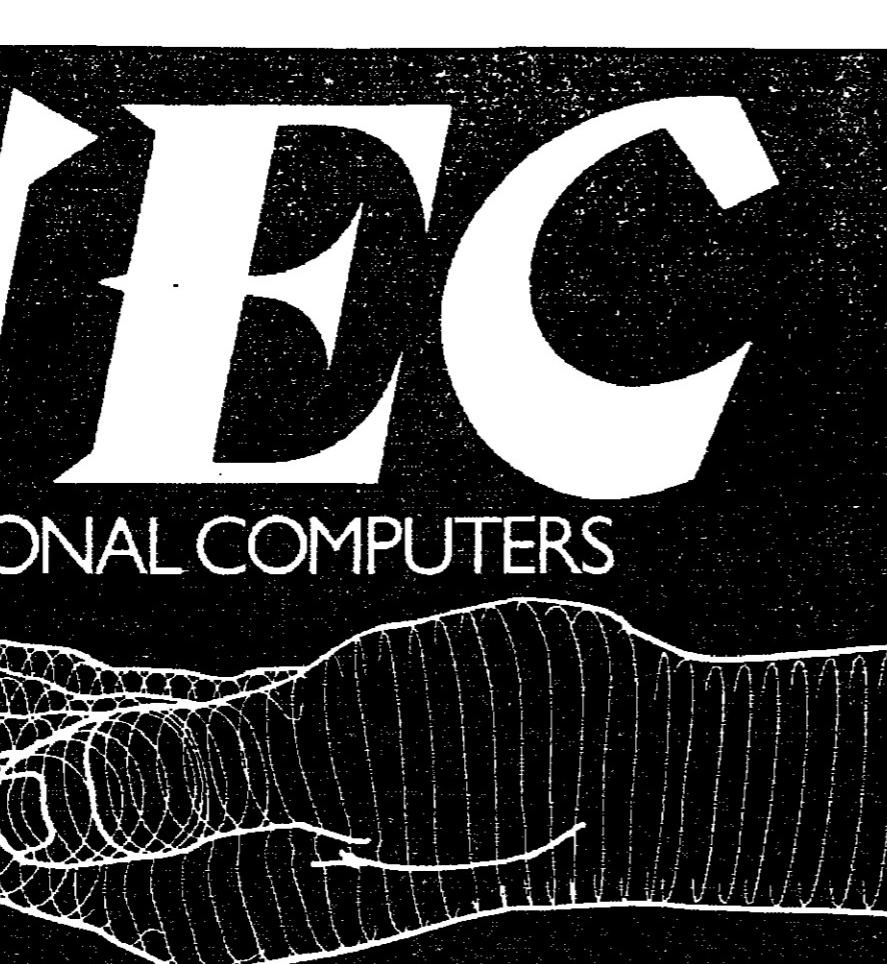
CAPITAL TRANSFER AND TAX PLANNING
WILLS
PARTNERSHIP TAX PLANNING
SCHOOL FEES
PRIVATE AND COMMERCIAL MORTGAGES
THE BRITISH EXPATRIATE
EXECUTIVE PENSIONS
SELF EMPLOYMENT DEFERRED ANNUITIES
GIFTS AND TRUSTS
INVESTMENT RETIREMENT

Order your copy now by completing and returning the order form below.

The Financial Times Business Publishing Limited,
102 Clerkenwell Road, London EC1M 5SA.
Telephone: 01-251 9321 Ext. 45.
Please note payment must accompany order.
Please send me copy/copies of Life Assurance and
Financial Planning at: £16.50 UK (£15.00 + £1.50 p&p)
 US\$35 Overseas (\$30 + \$5 p&p)
 I enclose my cheque value £/US\$ _____ made payable
to FT Business Publishing.
 I wish to pay by American Express/Barclaycard Visa/
Access/Diners (delete as required)
Card number
 I wish to order more than 5 copies; please contact me with
discounts. Telephone _____

Mr/Mrs/Miss _____
Job title _____
Organisation _____
Address _____ Postcode _____ Country _____
Nature of Business _____ Date _____
Signature _____ Date _____
Please allow 28 days for delivery. Refunds are given on books
returned in perfect condition and within 7 days of receipt.
Registered address: Brecon House, Cannon St., London EC4P 4BV.
Bank Account: Midland Bank, 5 Threadneedle St., London EC2R 8BD.
Account No. 5097615.

FT



Because we at NEC make most of the components for our computers, this naturally gives us a price/performance edge over comparable systems.

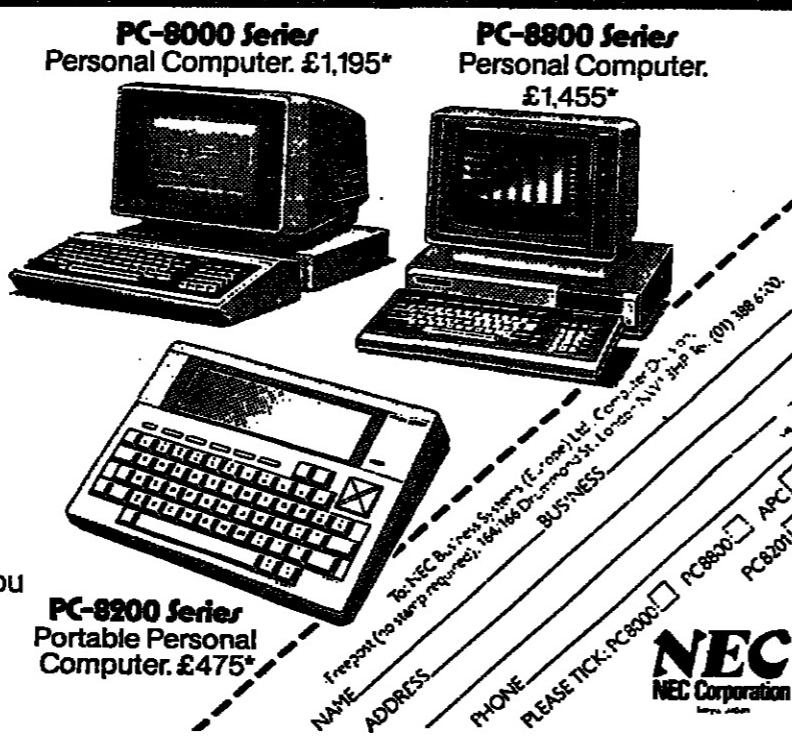
Which other company could offer a 64K byte CP/M system like the PC8000, with dual 5 1/4" disc drives and monochrome monitor, opening the door to a wide range of business software - including integrated accounting, word processing, business planning and graphics - for just £1,195?

Whatever the size of your business, there is one of NEC's flexible family of personal computers to give you the best price/performance in its class. (The amazing portable PC8200 means you can even open an office on the train).

* PC8000 16K RAM, 5 1/4" DISC DRIVES, MONOCROME MONITOR £1,195 EXCL VAT.

* PC8000 64K RAM, 5 1/4" DISC DRIVES, MONOCROME MONITOR, 5" DISC DRIVE, £1,455 EXCL VAT.

* PC8200 LAPTOP PORTABLE TECHNOLOGY, 16K RAM, 128K EXCL VAT.



New Issue

This announcement appears as a matter of record only.

January 31, 1984



AUDI FINANCE N.V.
Amsterdam, The Netherlands

DM 150,000,000
7 1/2% Bearer Bonds of 1984/1994

Irrevocably and unconditionally guaranteed by

AUDI NSU AUTO UNION
Aktiengesellschaft
Neckarsulm, Federal Republic of Germany

Issue Price: 100% • Interest: 7 1/2% p.a., payable annually in arrears on February 1 • Redemption: on February 1, 1994 at par • Denomination: DM 1,000 and DM 10,000 • Security: irrevocably and unconditionally guaranteed by Audi NSU Auto Union Aktiengesellschaft, Neckarsulm, Federal Republic of Germany. Negative Pledge Clause • Listing: Frankfurt/Main

COMMERZBANK
AKTIENGESELLSCHAFT
CREDIT SUISSE FIRST BOSTON
LIMITED
GOLDMAN SACHS INTERNATIONAL CORP.

BAYERISCHE VEREINSBANK
AKTIENGESELLSCHAFT
DEUTSCHE BANK
AKTIENGESELLSCHAFT

DRESDNER BANK
AKTIENGESELLSCHAFT
UNION BANK OF SWITZERLAND (SECURITIES)
LIMITED

Richard Daus & Co., Bankiers
Delbrück & Co.
Den Danske Bank af 1871 Aktionærsbank
Den norske Creditbank
DG Bank
Deutsche Genossenschaftsbank
Deutsche Girozentrale
– Deutsche Kommunalbank –
Dominion Securities Ames Limited
DSL Bank Deutsche Siedlungs- und
Landesrentenbank
Effectenbank-Warburg
Aldiengesellschaft
Enskilda Securities
Skandinaviska Enskilda Limited
Euromobile S.p.A.
EuroPartners Securities Corporation
European Banking Company Limited
Fuji International Finance Limited
Girozentrale und Bank
der österreichischen Sparkassen
Aldiengesellschaft
Gruppen der Banquiers
Privés Genevois
Gulf International Bank B.S.C.
Hambros Bank Limited
Hamburgische Landesbank
– Girozentrale –
Georg Hauck & Sohn Bankiers
Kommanditgesellschaft auf Aktien
Hessische Landesbank – Girozentrale –
Hill Samuel & Co. Limited
Industriebank von Japan (Deutschland)
Aldiengesellschaft
Instituto Bancario San Paolo di Torino
Kidder, Peabody International Limited
Kleinwort, Benson Limited
Kreditbank NV
Kreditbank S.A. Luxembourg
Kuwait Foreign Trading Contracting &
Investment Co. (S.A.K.)
Kuwait International Investment Co. s.a.k.
Kuwait Investment Company (S.A.K.)
Landesbank Rheinland-Pfalz
– Girozentrale –
Lazard Frères et Cie

Lehman Brothers Kuhn Loeb
International, Inc.
Lloyd's Bank International Limited
LTICB International Limited
Manufacturers Hanover Limited
Merck, Finch & Co.
Merrill Lynch Capital Markets
B. Metzler seed, Sohn & Co.
Mitsubishi Finance International Limited
Samuel Montagu & Co. Limited
Morgan Grenfell & Co. Limited
Morgan Guaranty Ltd
Morgan Stanley International
The Nikko Securities Co., Europe) Ltd.
Nomura International Limited
Norddeutsche Landesbank
Girozentrale
Österreichische Länderbank
Aldiengesellschaft
Sal. Oppenheim jr. & Cie.
Orion Royal Bank Limited
PK Christiania Bank (UK) Limited
N.M. Rothschild & Sons Limited
Salomon Brothers International
J. Henry Schroder Wag & Co. Limited
Smith Barney, Harris Upham & Co.
Incorporated
Société Générale
Société Générale de Banque S.A.
Sumitomo Finance International
Svenska Handelsbanken Group
Swiss Bank Corporation International
Limited
Trinkaus & Burkhardt
Kantonalkassen
Vereins- und Westbank Aldiengesellschaft
M.M. Warburg-Brückmann,
Wirtz & Co.
S.G. Warburg & Co. Ltd.
Wardley
Westdeutsche Landesbank Girozentrale
Westdeutsche Landesbank Aldiengesellschaft
Wool Gandy Limited
Yamashi International (Europe)
Limited

TECHNOLOGY

NEWS AGENCY LOOKS TO SPACE COMMUNICATIONS

Reuters eyes the satellite way

BY PETER MARSH

REUTERS. THE fast-growing news agency, is considering an experiment in satellite communications as a way of distributing financial information in Europe.

Spurred by its success with satellite links in the U.S., the company may send information to subscribers in Europe via one of the new generation of space vehicles, the ECS-2 craft that is to enter orbit later this year.

Signals carrying financial and business data would be relayed by the spacecraft to antennas in regional centres in Western Europe.

From here, the signals would travel by telephone lines to subscribers' premises.

The plans are still at an early stage and depend on negotiations between Reuters and national post and telecommunications administrations.

Reuters sends information electronically to about 40,000 terminals on customers' premises in Europe, Asia and North America. Most of this information is sent by high-speed land lines.

But in recent years the company has successfully introduced satellite services to customers in the U.S. Here, the company has set up about 1,000 small "dish" antennas on office roofs.

These aerials, about 70 cm in diameter, receive financial in-



Hugh Routledge
With electronic news already well established, Reuters use of satellites could give it a more economic way of transmitting data around Europe.

formation directly via a geostationary satellite. The service, introduced less than two years ago, cuts out the use of land lines.

As a result, Reuters can distribute data more economically.

WHITECHAPEL WORKSTATION

GLC backs UK computer company

DUE TO be launched in February is a powerful 32-bit computer workstation with a price tag more suited to a machine in the personal computer category, about £5,000.

Whitechapel Computer Works, a hardware manufacturer based in London's East End, is producing the machine. The company, which has been in existence since the end of May last year, owes its birth at least in part to the Greater London Council.

Funding from the Greater London Enterprise Board (GLEB), created by the GLC early last year, enabled the firm to start up. GLEB invested £100,000 and now owns a 30 per cent equity in the com-

pany. WCW, however, is now going out for second-round financing to coincide with the launch of the machine. The workstation is designed to as "a personal workstation"

to be as powerful as ICL's Perq or Rank Xerox's Star, but has much lower price tag. Initially it is aimed at the scientific and technical market, is based on the National Semiconductors' 16032 chip, which gives it full 32-bit arithmetical capability. Integral to the machine is a

half-megabyte user RAM, a floppy disc and a 10-megabyte hard disc.

The machine is being referred to as "a personal workstation" and its makers believe it to be the first of a new generation of machines which are priced at the top end of the personal computer bracket but has the capability of a powerful graphics workstation.

GLEB still retains close contact with WCW through Andrew Hartwill, an executive in GLEB's technology division who is also a non-executive director of WCW. Mr Hartwill said the launch of the new machine "demonstrates our commitment to fostering new-technology manufacturing in London. Whitechapel have themselves demonstrated precisely the viability of this concept." He added that GLEB hopes not only to have created jobs by funding the concern, but also to continue to learn about the computer marketplace from its sustained contacts with young firms.

WCW employs seven people but it hopes to grow to a workforce numbering 70 by the end of the fiscal year 1985-86.

mation is channelled to customers' terminals by cable.

Reuters' new "small dish" system has spelt good business for Equatorial Communications, a company in California that leases transponders on satellites and then re-sells them to organisations such as news agencies.

Associated Press and United Press International, as well as Reuters, rent communications hardware from Equatorial Communications in this way.

The Californian company, which started operations only two years ago, handles the flow of data to about 10,000 small antennas for offices throughout the U.S.

Sales have increased from \$9.6m in 1982 to an estimated \$17m in 1983. Growth has been so rapid that Equatorial Communications wants to launch in 1987 two satellites entirely for its own use.

At present the company has leasing arrangements with Western Union and Hughes Communications, both of which operate their own spacecraft.

Dr Edwin Parker, a director of Equatorial Communications, says he "sees the potential" of small-dish business services in Europe.

But he says the shortage of high-power satellites for Europe may delay such schemes.

Crucial tests approach for cable TV

EDITED BY ALAN CANE

WHEN ENGINEERS make something possible, if it is really important three other phases will follow. The politicians will find ways of exploiting it, the economists will wrangle with statistics to test its viability, and last of all — if it survives these hurdles — others must move in to make it work commercially. Such has been the continuing saga of cable television in Britain, and now only is that final and crucial commercial stage arriving.

In recent weeks the newly-expanded cable TV industry in the UK has been in a flurry of activity, suddenly faced with making the technology and the programming promises a working reality. For the cable operators, especially the 11 franchised for new installations, the engineering task alone is daunting enough — with 100,000 swivel arm, head-end equipment and subscriber converters for TV sets all due to come on stream in the coming months. Rediffusion, even for its existing 53 networks now about to be upgraded, has already placed initial orders for £6m to cover satellite receiving dishes, control desks and a host of other TV equipment.

It is, however, the commercial challenge which now moves to the centre of the stage. Not only do the operators have to install the service, they also have to sell it to the television viewing public, programme it and also find additional sources of revenue through advertising. Recognition of this commercial emphasis came last week with Rediffusion's announcement that a recruiting drive is being launched by the group for 1,700 new staff. Although not all of these jobs will be permanent, the significant point is that 1,300 of the total will be "salespersons."

As an executive from Thorn EMI recently said — "anyone involved in the cable business in any way has to be a marketing person." The reasons for this are simple. Some forecasters reckon that for new U.K. cable networks to return a profit in their planned life span (12 years for some) they must reach a minimum take-up rate of 30 per cent — probably even 50 per cent. Cream on the top might be advertising revenue.

There is, however, another

Video & Film

By JOHN CHITTOCK

It is the
commercial challenge
which moves to
the centre of
the stage

recent activity in acquiring programmes for the new services is dominated by price sensitivity. Whole programme channels are being signed up by operators at rates generally from 10p to 25p per subscriber per month — and some of these channels will provide as little as three to four hours per day, repeated perhaps two or three times.

It is now that the commercial pricing policies have to be hammered out — setting standards of practice where none existed before. On the premium service channels running feature films, a different strategy is emerging. The operators are generally agreeing to share subscription revenue for these channels with the programme providers on a 50/50 basis — probably pitching the subscriber rate at up to 25 pence (over and above the basic service charge which may range from just under 55 per month upwards, depending on the local service provided).

For the 11 new operators, who will provide many more channels than the four generally available on existing

systems, extra services for additional payments will be offered — such as the games channel from W.H. Smith.

Nonetheless, the pressure to keep prices down is such that many channels will look instead to advertisers to boost revenue. Some bought-in channels acquired by operators will come complete with advertisements sold by the channel provider — but allowing scope for local advertisements to be fitted with such figures.

It comes as no surprise, therefore, to find that the cur-

Last week's news that the government will not require operators to limit advertising to the six minutes per hour imposed on ITV may be of little comfort.

Cable operators are still discussing the actual advertisement rates but generally the principles established for broadcast TV will apply, based on audience size.

In the current commercial activity, it is important to emphasise the two kinds of cable TV services involved. With its fondness for enlarging our vocabulary, the industry has designated them "upgraded" and "new-build." The former are existing networks which until now have relayed broadcast TV (and in some cases feature films) under the terms of a limited experiment sanctioned by the Home Office). The latter are the new networks which must provide greatly extended services and will not begin to come on stream until 1985.

Up-graded services are starting in some areas any time between now and March. Subscribers who have been receiving broadcast TV via cable will be provided with free aerials and generally have four new channels available on the old cables. Thorn EMI are offering feature films, children and teletext/telesoftware. Rediffusion similarly offer music and films, plus the general entertainment Sky Channel from SATV and Screen Sports' Channel.

At this stage, the government's hopes for a boost to the economy, and to technology, are being realised — in an extraordinarily short time. But to ensure that none of this occurs at the expense of the investors, the marketing men must do some hard trail-blazing in the wake of the engineers.

FACTORIES IN 2001 A.D.

March 4th & 7th 1984
Sheraton Skylon Hotel
Heathrow
For Conference details and registration:
JILL BARKER
Computer Application Consultants
Tel: 0998 23377

Measurement Automatic changer

THE PROBES used in coordinate measuring machines made by Carl Zeiss can now be changed automatically, in the fashion of the automatic tool changers used in modern machining centres.

Using the equipment, which is available for retrofitting from Hahn and Kott, Rugby, the measuring machine becomes able to inspect a mix of different products without manual intervention.

The probe changing device is based on a magnetic coupling in the probe head which allows the head to grip or release a probe under program control. Recalibration after a probe change is said to be unnecessary. The system can handle arrays of probes as well as single devices.

Workpieces are placed in holding devices on the table of the machine which can then inspect them automatically, using data drawn from the controlling computer. The machine could therefore run unattended, say at night, when the workforce has gone home. More on 0788 74261.

Medical Ultrasonic eye-scanner

HARWELL has developed an ultrasonic imaging and recording system for the ultrasonic eye scanner at the Moorfields Eye Hospital.

It displays the ultrasonic images of the eye onto a standard television screen. This is then recorded on a standard videocassette recorder.

Such recordings can then be stored for later analysis, used as a guide during surgery and used as reference for treatment sessions. In addition it can be used as a teaching aid by the hospital.

Airline of The Year.

"This Year's winner could have won several of our other awards along with the top honors.
"SAS could have won our Passenger Service Award for its many innovations and quality service.
"It could have won our Financial Management Award.
"For years of outstanding technical management we could have given SAS our Technical Management Award.
"Finally, a good argument could be put up for giving SAS our Market Development Award.
"But rather than give all of these awards to one airline the same year, we simply awarded SAS with our top honors."
Thank you, thank you, thank you, Air Transport World.
We're blushing all over, here at SAS.

SAS
The Businessman's Airline

جامعة الملك عبد الله

THE ARTS

London Galleries/William Packer

Face to face with the famous and notorious

Our great collecting institutions forever face the unenviable chore of trying to square the unsquareable. Charged with the public duty of extending and enhancing their particular collections, as policy and chance alike direct, and with funds always so much in short supply, it is quite unrealistic they continue more or less judiciously to squeeze the pint into the quart pot, which by degrees, eventually fills up.

What would we really have them do? Stop collecting altogether, and leave to a thankful posterity finite collections, with gaps here and there, all thus whole fields of continuing historical speculation impossible to serve? Even disperse what we already have, on the convenient but mendacious egalitarian principle that it would thereby be so much more readily accessible? Give it back, abroad, which is the ignorantly mischievous answer to a particular topical question?

As always, the word of authority is: these are difficult times; so shift for yourself the best you can. But no party, even in better times, has ever dared risk votes on art or culture, and implicit promises for the future have a hollow ring. All educated opinion agrees that what is currently proposed would in practice make things very much worse; which brings us to present shifts and strategems. The National Portrait Gallery, like the Tate, is bound to monitor the immediate quite as much as the remoter past, and like the Imperial War Museum, has to extend its scope beyond what is simply the best of its kind to what is relevant, useful, interesting, informative. It will naturally wish to acquire whenever possible true works of art, and it does indeed hold many fine and beautiful things, but other material of all kinds that falls within its brief — portrait material relating to any individual who has made a notable contribution to our national life — is their necessary complement: press photographs, snapshots, cartoons, caricatures, amateur efforts.

There has never been a proper display of the 20th century material, a fraction of it in the basement for a while, and more lately in halls and landings here and there. But now that the principal exhibition gallery on the top floor is in use, and the pressure on the other temporary showing spaces eased somewhat, the time has come to reorganise, in which general post the suite of galleries at the top of the entrance stairs has been given over to a permanent though hardly immutable 20th century hang. The display is now up and running, which last word I use advisedly, for a principal feature of the installation is the turntables, 13 of them, each carrying four distinct groups of works.

Exhibition design is a new and doubtful discipline, but nothing that it perpetrates, however objectionable, is irreversible. Here the arches and arcades are perhaps a shade overbearing, the alleys a little narrow, some of the pictures set too high for comfortable viewing, and the moveable feast is disconcerting to say the least when the light first goes out and the turns. But we get used to its little ways soon enough, and even forgive it for having no hole button to allow extended consideration, who is to say that the technology will not at last catch up with the idea.

There they all are, the famous, the notorious, the talented and distinguished, in their professional groupings, categories: athletes, poets, scientists, lawyers, film stars, actors, politicians, painters, soldiers, musicians, dancers, lords and ladies. The Sitzwells have an enclave to themselves, and Dame Edith on tape, Face to Face with John Freeman; Ellen Wilkinson strides through Cricklewood with the Jarrow marchers; Stanley Matthews signs his autograph outside the changing room door; Beatrice Webb sits on the doorstep for her photograph by Bertrand Shaw. The interest is as broad in scope as it is fascinating in detail, each item well chosen and to the point.

But inevitably, where all are equal as worthy subjects for



John Minton, Self-Portrait 1953, and Dame Laura Knight, Self-Portrait 1913, both from the New Twentieth Century Display at the National Portrait Gallery

the collection, some are rather more equal than others as art, and the more substantial works of art command attention by right, whether the subject is Virginia Woolf, a ravishing young woman of 20 in her photograph by George Bernard Ford in 1902; or Vivien Leigh nearly 50 years on and quite as beautiful, by Angus McBean. But the painters have the advantage, those who paint themselves, perhaps, most of all. The Sitzwells have acquired an extremely fine double portrait of Maynard Keynes with his wife, the ballerina, Lydia Lopokova, in 1932, by William Roberts, as strong and unmanured a painting as he would ever make: but even that

must give place, in scale and simple effect, to Laura Knight's large portrait of herself at work in the life studio 1913; or, in poignancy and concentration, to John Minton's rather smaller self-portrait of 1952.

The National Gallery's problems are not quite the same, concerning more of the frightening prices commanded by capital pictures than by quantity, and all the pictures in the reserve collection, other than those on loan or under restoration, are hung and may be seen, though the visitor may need to ask for the company of a keeper to do so.

The Capricious View (until March 18, then to Canterbury, Wolverhampton, Lincoln and

Exeter), a touring show of only fifteen small 17th and 18th century Dutch and Italian paintings, draws largely on this reserve, offering a bare yet tantalising hint of what uncollected, indeed unlocked-for treats lie sleeping there below. The theme is the fantastical and suggestive townscape, quite imaginary yet so often, as in the romantic antiquarianism of the 18th century, so closely founded in reality; it needs only two Canaletto views of Venice alongside a delightful Panini caprice of figures amongst tumbling Roman masonry, and a fine if only putative Bellotto landscape with assorted ruins, to make the point. It is a modest show, and

charming within its limitations, but frustrating, too, for the idea is so good that it could well sustain a major scholarly elaboration. Artists have always made things up for there has never been a rule requiring them to consult direct reality at all, let alone with any conscientious fidelity. And so here we long not only for the contemporaneous caprices of a Poussin or a Claude, or whatever, but an extended comparative jaunt through the pictorial imaginations of the centuries, back to the early Italians, onward to India, China and Japan, and on down to the more feverish confections of symbolists, metaphysicals and surrealists.

Margaret Price/Covent Garden

David Murray

Miss Price appeared on Sunday in the Celebrity Concert series with the programme of an international gladiatrix: mostly big songs, nothing experimental or out-of-the-way (unless you count Mozart's "Little German Cantata," which I think has been a Price favourite for a long time) — simply a selection of songs and Lieder most suited by toppings these days. She was in superb form. The front-stage platform at the Royal Opera didn't always acutely sympathetic with his singer, even if he supplied little in the way of romantic sonorations. Of course, "Du meines Herzens Knechtlein," was melting and unabashed.

"Morgen" wonderfully intense. Miss Price's Mahler consisted of the five late Rückert Lieder (omitting the military vignettes), all of them glowing; perhaps the "Linden Duft" song ended irresolutely, not quite rounded off, but "Um Mitternacht" — very difficult to bring off without its dark orchestral support — was a tour de force. The Celebrity Concerts are rarely so polished and satisfying.

Music of the Andes/Shaw

Andrew Clements

The excellent World Arts Season presented by Arts Worldwide and the Borough of Camden continued on Sunday at the Shaw Theatre with a visit by the Sulca family from Ayacucho, Peru. They played violins, mandolin and Andean harp in a programme of music characteristic of the highlands of Peru, with its origins in the culture of the Incas and their Quechua-speaking descendants. Both instruments and music are a fascinating mix of native and imported elements. The splendid Andean harp itself, played here by Antonio Sulca, is said to have evolved from the Celtic instrument brought over by Irish Jesuits; in Quechua hands, however, it was developed extensively, its sound box greatly enlarged to give a resonant bass and sharp-toned treble, and prompting the highly mobile bass lines typical of the music.

Keeping the theatre alive in the North West

Any play that starts as it means to go on, with an exposition of the Special Theory of Relativity delivered by its formulator with the help of red-nosed clowns, deserves awe and admiration. Seriousness of purpose almost redeems the subsequent impression of an apocryphal Einstein theory: Brothel plus Schools Broadcast didacticism over three hours equals boredom.

Act I of Norman Leach's *The Life of Einstein* (The Duke's Playhouse, Lancaster) is a crash course in the physicist's early theories and unrecognised genius; Act II expands the political background of the interwar years. The last act — and a long evening is not quickened by false endings with such film-projected chapter headings as "Deathbed," "Epileptic" and "Einstein's Last Words" — focuses on the scientist's attitudes to atomic power and the Cold War.

Throughout, the cast of six retire to onstage changing-room benches, ringing variations on their basic costume of white shirt and dark trousers to assume an epic range of Paris. The exception is Janice Jarvis's Rosa Luxemburg whose presence haunts Einstein like a conscience, comforting, arguing and exhorting.

Despite emphasis on the great

man's desire to "learn something of humanity, that other mystery," he remains less alive than his background or his achievements. No back-handed compliment intended, but Paul Bradley's Einstein is strongest when silent. When not pontificating (rarely) he passes with honour the good actor's acid test of knowing how to listen convincingly.

Apart from chunks of neat theory, we are treated to politicians in carnival heads conversing in doggerel ("It's those Sparcists I hate/I like my socialism moderate.") By the last act the rhymes, witness beyond the call of satire, merely grate. Infinitely more shocking are historical facts reported straight: a Nazi professor's acid test: a Nazi professor's acid test of knowing how to listen convincingly.

Fascinating sidelights on the McCarthy era include the often overlooked bellicosity of Bertrand Russell's impassioned anti-Soviet stance in 1948 ("even at such a price would be worthwhile") and Ginter Roger's mother objecting to her daughter's utterance of such Communist-inspired screen dialogue as "Share and share alike—that's democracy."

Einstein's political naivety is illustrated by his listing of America's faults — indoctrination, without the Duke's would be "a boring dead place"; and rest my case.

Few Prosperos acknowledge the final curtain of *The Tempest* with a standing backsomerset; or deliver lines flat on their back, legs in the air, with Ariel perched on their feet. Glen Walford's production for the Everyman, Liverpool, sees the magic island as a circus ring peopled by clowns and acrobats. Within limitations this streamlined version works well enough to evoke occasional rough magic.

On the central podium the striking-looking black ringmaster cracks his whip like something out of *Lulu*. The company enters as a parade of clowns. On trundles the grey-skinned Ariel in a giant hamster's wheel; the young lovers are suspended in a skeletal crescent moon high above the action. Actors awaiting their cues sit round the ring adding to the isle's noises by humming or playing instruments.

Textual cuts can be condoned, the Everyman's predominantly young audience and, less pardonably, the unevenness of delivery that extends to a Ferdinand more expressively on clarinet than vocals. Purely verbal irony is skated over and too often the verse is simply blank: a feeling for the rhythm would have precluded Caliban's insertion of an extra word into his "sweet airs" speech. Significantly, Stuart Organ, with RSC experience, contributes a clearly-spoken and therefore intelligent old Gonzalo.

Rico Ross, from TV's *Hill Street Blues*, is a vigorous young Prospero whose writhing before the conspirators' plot suggests the inner torment of long self-exorcism come to fruition. When happier with his clipped patrician English, he may deepen this sombre interpretation.

The comedies themselves are distinguished by Bob Hewis's crisp and unexaggerated Stephano, in baggy checked trousers and outsize frock coat, as nifty on the saxophone as Mattheus Devit's Trinculo is on trombone.

Burt Caesar attacks a vivid Sebastian with the relish that would invigorate any Jacobean machiavel; and neither over-careful elocution nor featured tutu can disguise the forthright strength of Cathy Tyson's dusky Miranda, perhaps more suited to modern naturalism. Paddy Cummins's music, both perky and haunting (Prospero's singing of "Full fathom five" is particularly successful) deserves mention, as do a sign of the times — Phil Lancaster and Derek Owen, "Aerobatics Consultants."

The Man of Mode/Richmond

B. A. Young

The Orange Tree shows its usual courage in playing a Restoration comedy on a stage like a postage stamp, with one single item of scenery that is a lady's dressing-table one way up and a hiding-place for a person another way up.

Etherege's comedy, in this production under Simon Walters, has lost some of its fire, and seems to rely just on the simple comedy of the plot, which is like a game of draughts, where one piece is brought up against another and either takes it or is taken. The satire has leaked away. After Tom Georgeson as Dorimant, and Christina Greatrex as Mrs Lovell have played their last scene together it seems natural, almost honest, that he should marry the innocent country girl Harriet, though any Regency rake could tell you that he'd be back in the Mall within a fortnight.

I think Mr Georgeson is too severe, too much weighed down by his life of sexual deceit. I'd have liked a sign of the beau feutre, who punctuates his lines with quotations from the poet Waller (Mr Georgeson makes them sound like ecclesiastical texts) — possibly even a hint of join in the satire.

Arts Guide

Music/Monday, Opera and Ballet/Tuesday. Theatre/Wednesday. Exhibitions/Thursday. A selective guide to all the Arts appears each Friday.

Opera and Ballet

LONDON

Royal Opera, Covent Garden: The Revival of *Wozzeck* is cast at strength — José van Dam, Anja Silja, Kinga Dombovári, and conducted by Christopher von Dohnányi with power and eloquence. La Bohème returns with the Hungarian soprano Ilona Tokody (Royal Opera debut), José Carreras, and Thomas Allen, and the highly gifted American conductor John Mauceri in charge (£30-£60).

English National Opera, Coliseum: A most gripping and beautifully sung Turn of the Screw, with particularly distinguished contributions from Julian Gómez and Philip Langridge, at the Royal Opera House, Covent Garden, in which Nelly Miricioiu introduces to London her fragrant, vocalistically luscious heroine (£33-£36).

Sadler's Wells Theatre: The New Sadler's Wells Opera continues its latest season with a new production of Flotow's Martha and a revival of last season's Countess Mariza (£28-£816).

Royal Opera House, Covent Garden: The Royal Ballet in *Le Rôle mal Gardé* (Tue)

PARIS

Die Entführung aus dem Serail conducted by James Conlon, produced

January 27-February 2

NEW YORK

Metropolitan Opera (Opera House): The first performance of *Strauss*, conducted by James Levine with sets by David Hockney, accompanies a week's performances of *Rinaldo* conducted by Mario Bernardi and starring Marilyn Horne. La Traviata with Kiri Te Kanawa, in the Paris Opera (1423750).

Kirov: *Arjandov's Ult* with Carlotta Ikeda as soloist, choreography by Ko Murobush. An exclusively feminine ensemble in a brilliant demonstration of the Butoh Dance is followed by a rejuvenated Phobolos Dance Theatre at the Théâtre de Paris (230-9230).

New York City Ballet (New York State Theatre): The company's season of modern dance includes performances this week of Western Symphonies, Afternoon of a Faun, and Concertino. Lincoln Center (870-5570).

West Germany

Berlin, Deutsche Oper: To mark the 100th anniversary of Wagner's death, the complete *Tannhäuser* is offered this month. It is choreographed by Valery Panov, danced to music by Richard Wagner, Giacomo Meyerbeer, Felix Mendelssohn-Bartholdy and Hector Berlioz. Soloists are Eva Evdokimova and Thomas von Cauwenbergh. (Fri.) Der Nussknacker, choreographed and danced by Rudolf Nureyev. His partner is Eva Evdokimova (Mon.)

Peter O'Hagan/Purcell Room

Andrew Clements

To his enterprising and nicely contrasted programme in the Purcell Room on Wednesday Mr O'Hagan proved a generally solid if unexciting guide. Boulez's piano music has by now means yet become a regular feature in recitals, and his third sonata is the rarest visitor of all. Yet Mr O'Hagan made it the main work of his first half, in rather like those two fortresses of "Trope" and "Constellation miroir," that the composer permits to be performed.

It remains a challenging proposition for any pianist, technically and intellectually. Mr O'Hagan was only partially equal to it, for while he gave a good account of the bulk of the sonata, he did not convey anything of its real character or give any reason why he should have (quite justifiably) included an extract from Mallarmé's "Un coup de dés" control told most of all; the clusters of scintillations that decorate the main paragraphs of the score, like diamonds glistening in his programme note. The fluidity, the quicksilver changes of mood and colour that aleatoricism introduces were all missing. A lack of textural only dull, while the balances of harmonics were lifeless.

Monochrome pointing and stodgy rhythms also deprived Bartók's Suite *Out of Doors* of

vital interest. There was a genuine sense of rubato in the "Barcarolle" and "The Night's Music," but the latter was generally handled roughly, without any sensitivity to atmosphere. In two of Liszt's Transcendental Studies and Schumann's *Carmina Burana* purely technical difficulties were more apparent, stumbled passage-work that no amount of honest endeavour could hope to hide.

Saleroom

Antony Thorncroft

Eleven Impressionist and Post-Impressionist paintings from the estate of Erna Wolf-Dreyfus and Julius Wolf are to be sold at Sotheby's in New York on May 15. The saleroom is expecting the collection to make in excess of \$12m.

Works by Gauguin, Van Gogh and Degas are included, as well as four by Renoir, and paintings by Manet, Monet and Toulouse-Lautrec.

The attraction of the auction is that the collection was assembled around 50 years ago and the paintings will be fresh on the market. Given the current strength of demand for Impressionists, the prices could be much higher than Sotheby's estimate.

Swiss Luxury Apartments
Premium furnished apartments, ideal for business, leisure, study or relaxation.
Complete furniture, linens, telephone, television, air conditioning, central heating, laundry service, maid service, parking.
Davoser Immobilien AG, 7270 Davos Platz, Switzerland
Property Forum
113A High Street, Tonbridge, Kent TN9 1DL, UK
Tel: 0732 366129 or
Tonbridge: 0892 37522
Please send details to:
[Redacted] Tel: [Redacted]



Could this be YOU
in a few years' time?
remembering the friends
who used to call.

He lived, provided, through years of dedicated professional service to others. He looked forward to an old age of dignity and basic comforts — and he knew, since childhood, that his diminished physical condition and increasing infirmities had left him on his own. Friends and family, who once were his social circle, have moved on. His wife died, his children have grown up and married, his parents are gone. He is alone.

He is lonely, he is afraid. He is vulnerable. He is in need of care and assistance. He is in need of love and affection. He is in need of a home. He is in need of a roof over his head. He is in need of a place to live. He is in need of a place to sleep. He is in need of a place to eat. He is in need of a place to bathe. He is in need of a place to go to the toilet. He is in need of a place to go to the doctor. He is in need of a place to go to the hospital. He is in need of a place to go to the dentist. He is in need of a place to go to the optician. He is in need of a place to go to the hairdresser. He is in need of a place to go to the supermarket. He is in need of a place to go to the post office. He is in need of a place to go to the bank. He is in need of a place to go to the library. He is in need of a place to go to the cinema. He is in need of a place to go to the theatre. He is in need of a place to go to the pub. He is in need of a place to go to the park. He is in need of a place to go to the beach. He is in need of a place to go to the mountains. He is in need of a place to go to the sea. He is in need of a place to go to the countryside. He is in need of a place to go to the city. He is in need of a place to go to the suburbs. He is in need of a place to go to the village. He is in need of a place to go to the town. He is in need of a place to go to the city centre. He is in need of a place to go to the shopping area. He is in need of a place to go to the business district. He is in need of a place to go to the residential area. He is in need of a place to go to the industrial area. He is in need of a place to go to the agricultural area. He is in need of a place to go to the coastal area. He is in need of a place to go to the inland area. He is in need of a place to go to the rural area. He is in need of a place to go to the urban area. He is in need of a place to go to the suburban area. He is in need of a place to go to the town area. He is in need of a place to go to the city area. He is in need of a place to go to the residential area. He is in need of a place to go to the business area. He is in need of a place to go to the industrial area. He is in need of a place to go to the agricultural area. He is in need of a place to go to the coastal area. He is in need of a place to go to the inland area. He is in need of a place to go to the rural area. He is in need of a place to go to the urban area. He is in need of a place to go to the suburban area. He is in need of a place to go to the town area. He is in need of a place to go to the city area. He is in need of a place to go to the residential area. He is in need of a place to go to the business area. He is in need of a place to

THE MANAGEMENT PAGE : Small Business

NatWest's 'flying doctor' service

LIKE IT or not, UK banks have been forced to rush to the rescue of hard-pressed company clients during recent, tough years. Most have set up fee-charging business advisory services or intensive care units.

NatWest, the UK's second largest bank, by contrast, has set up a free flying doctor service: teams of bankers and accountants who call on troubled clients and try to help them get a grip on their problems.

"We find there's a crying need for the kind of help bankers and accountants can give," says John Melbourne, assistant general manager of the domestic banking division.

In the three years since it was started, the service, which goes by the bland name of the industrial unit, has grown to seven teams each consisting of a NatWest banker and an accountant on secondment from an accounting firm. Six of the teams are based in London, one in Manchester.

When cheques start bouncing or a client shows other signs of stress, a team visits the firm spending three or four days sorting through the books and putting together a picture of the business. It then goes away and prepares a report with recommendations.

"We can get a lot more detail than the branch manager can," says Tony Hennessey-Brown, the manager of the unit. "People see us as independent investigators."

Invariably, the problem turns out to be poor financial controls, and the NatWest men try to advise on how they can be tightened up. But in one case they turned up evidence of

David Lascelles

In brief...

QUEENSEATE, Huddersfield HD1 3DE. Tel: 0484 22288. THOSE running courses up and down the country may be interested in "That Giant Step" — a video about small business start-ups made by John Thompson of Huddersfield Polytechnic's Department of Management and Administrative Studies. It features seven quite different small businesses ranging from a self-employed potter to the "organizer" — entrepreneur — and deals with the problems faced, and advice and assistance available to overcome them. The video, which is not a teaching programme, can be obtained from John Thompson at the Polytechnic,

Tim Dickson highlights the importance of exporting and looks at schemes to support overseas sales

Tenacity is a necessity

"EXPORT OR DIE" is a stark enough choice. But a former sales director of Stockport-based Thermatic Engineering Services can claim that five years ago he almost managed to do both.

Following up a lucrative Eastern bloc contract for which the company had been short-listed, the unfortunate executive was forced to pack his bags when two plain-clothes militiamen—evidently mistaking him for an imperialist spy—worked him over in the swing door of an East German hotel.

That, according to the present finance director, Iain Croft, was Thermatic's first attempt to break into overseas markets. And in the circumstances no one could have blamed the company if it had been the last.

In recent months, however,

Thermatic has enjoyed considerably more good luck and, against all the odds, is now in the happy position of completing a £1.6m contract to equip seven Saudi Arabian chiropody and sun-stroke centres with fire protection equipment and air conditioning. The locations

—four at Mecca and three at Medina—are being built specially for the tens of thousands of pilgrims who flock to these cities each year.)

Besides gamely overcoming many of the obstacles facing first-time exporters—and learning some invaluable lessons on the way—Thermatic has shown that tackling an overseas market is one way, albeit highly risky, of combatting recession at home. (The company is primarily a design heating engineer, and sub-contracts all manufacturing.)

It was Thermatic's sister company, Fireproof Sprinkler Systems, in fact, which ran into difficulties in the UK during 1981 and 1982. Most of its orders came from business customers carrying out instructions from their insurers to put in sprinkler systems—but when some aggressive American insurance groups entered the British market and waived this requirement, turnover fell away.

In an effort to replace these sales Thermatic got itself onto the British Overseas Trade Board's "Export Intelligence Scheme," which supplies subscribers with details of overseas inquiries for products and services and calls for tender at 35p per item. As a result of a lead from this source, David Gough, an FSS salesman travelled out to Saudi in October 1982 and, following some tough and protracted negotiations, won a £1m order for fire protection equipment for the hospitals



David Gough (left) and Iain Croft: tough and protracted negotiations

from a local contractor, Alawi Tuasi. In December, Thermatic successfully bid for the air conditioning and chilled water systems as well, bringing the total value of the deal to £1.6m. Considering the company's turnover was then a "mere" £1m in the UK—and the contract was due for completion in 14 months—those involved faced a major operational and financial challenge.

Most bizarrely perhaps, nobody at Thermatic will ever be able to see the fruits of their Saudi labours for only Moslems are allowed inside the City limits of Mecca and Medina. Sensibly the company overcame this problem by sub-contracting assembly and engineering work to a Turkish firm which has fortunately proved reliable—but numbers are nevertheless required to convey messages from the designers hovering at the City gates to those responsible for carrying out instructions on site.

The biggest challenge was undoubtedly how to finance such a huge "one-off" contract, insure against the foreign exchange risk, and ensure payment from the other end. "It was gross over-trading," admits Croft with a grin, though he adds that overseas contracts of this nature have got to be big to be worthwhile.

Since the Saudis had agreed to pay in United States dollars, Thermatic decided that it was vital to negotiate forward exchange cover when its own costs were calculated at a rate of \$1.53 to the £. After weeks of negotiations with its bankers, however, the company got a major shock when its bank explained that it required at least 20 per cent of the value of the contract (£300,000) to be offered as security (either in an unused borrowing facility or as cash on deposit).

While investigating the possibility of using the LIFFE market, Thermatic fortunately ran into the commodity brokers, E. F. Hutton, which agreed to a much cheaper deal than National Westminster and required "equity" of only 2 to 3 per cent of the contract.

Gough, however, cautions: "If small companies think exporting is a panacea for all their problems, forget it. We were very lucky. Other people have spent a year or 18 months bidding for overseas contracts and got nowhere."

The company did use NatWest to confirm a guaranteed letter of credit but, as Croft readily concedes, betrayed its inexperience by "doubling up" with cover from the Government's Exchange Credits Guarantee Department. "All we were in effect getting for a 0.58 per cent premium was guarantee against civil war in Saudi Arabia, war between Britain and Saudi Arabia and NatWest going bust. Next time we'll know better."

Financing the deal, meanwhile, was not helped by the voluntary liquidation of Fireproof Sprinkler Systems last February. As a result of the cross debentures and cross guarantees Thermatic's overdraft was withdrawn and the company's credit management skills were consequently put to the test. Agreements were reached for U.S. equipment suppliers to be paid in dollars on the same payment terms as Thermatic was receiving, while payment terms were pushed to the absolute extreme with other suppliers.

Fortunately the domestic side of the business had had a very good year and by its nature generated cash. But we still had to pay suppliers for £150,000 before we got our money and in October film went in and out over two days at the end of which we were £6,000 to the good. It all got a bit hairy."

Discussing his experiences in negotiating the contract, David Gough stresses the difference between selling in the UK and selling in the Middle East.

"The thing about the Saudis is that they don't seem to accept what you say on price. If you stand your ground they respect you but I was staggered how some of the big companies quoting for other parts of the contract were lopping vast amounts off their quotation.

The same goes for the terms and conditions we simply were not prepared to accept. Some of them but when they realized that they had pushed us as far as we would go they backed down."

Thermatic is now bidding for an even bigger Middle East contract with Gough having bought part of FSS from the liquidator with a couple of colleagues. He is now on his own, is also increasingly active in export markets.

Gough, however, cautions: "If small companies think exporting is a panacea for all their problems, forget it. We were very lucky. Other people have spent a year or 18 months bidding for overseas contracts and got nowhere."

EDITED BY CHRISTOPHER LORENZ

A helping hand

"IT'S NO good sitting back and hoping someone will turn up at your factory," says Gisella Burg about would-be British exporters. "Like our overseas competitors we've got to visit other countries, display our products at exhibitions and make as many overseas contacts as we can."

Burg should know. Over the past 15 years this former The Times Veuve-Clicquot Businesswoman of the Year has built up the London-based Exportus into a successful export marketing company for professional audio equipment manufacturers.

But while her energy and personality have played a vital part in the achievement, Burg is the first to pay credit for the help provided by the Government's British Overseas Trade Board, on which she sits as a member of the private sector small firm representatives. "Eighty-two per cent of the BOTB's clients have less than 200 employees," she explains, "and many of the services are tailored for the smaller business. They are aimed very much at the many companies which have a good, exportable idea but which lack the necessary financial resources or management skills."

Fortunately the domestic side of the business had had a very good year and by its nature generated cash. But we still had to pay suppliers for £150,000 before we got our money and in October film went in and out over two days at the end of which we were £6,000 to the good. It all got a bit hairy."

Discussing his experiences in negotiating the contract, David Gough stresses the difference between selling in the UK and selling in the Middle East.

"The thing about the Saudis is that they don't seem to accept what you say on price. If you stand your ground they respect you but I was staggered how some of the big companies quoting for other parts of the contract were lopping vast amounts off their quotation.

The same goes for the terms and conditions we simply were not prepared to accept. Some of them but when they realized that they had pushed us as far as we would go they backed down."

Thermatic is now bidding for an even bigger Middle East contract with Gough having bought part of FSS from the liquidator with a couple of colleagues. He is now on his own, is also increasingly active in export markets.

Gough, however, cautions: "If small companies think exporting is a panacea for all their problems, forget it. We were very lucky. Other people have spent a year or 18 months bidding for overseas contracts and got nowhere."

plus an analysis of the specific prospects for the product and potential exporter. The £150 fee (which includes VAT) can be refunded as a contribution towards travel costs if an encouraging report stimulates an overseas visit by the BOTB's customers.

Funds, meanwhile, are available to finance between one-third and one-half of the costs of export marketing research (carried out by a management consultant or group of firms) while the Export Representative Service will help find a suitable agent or distributor of importers and the Overseas Status Report Service offers assessments of these representatives.

Such much-needed service is Technical Help to Exporters under which detailed information on foreign regulations and standards can be provided. Smaller firms can get up to £100 of help free and, as a BOTB spokesman points out, can be used to avoid elementary mistakes. "We had a firm recently that shipped toasters to the Middle East but on arrival they blew up because the voltage was wrong."

Exporters visiting overseas markets as part of approved outward missions can get contributions towards their costs while financial assistance is offered to companies wishing to bring overseas businesses into the UK.

Subsidised space is provided at overseas trade fairs and under the joint venture scheme groups of companies in an industry can stage a special exhibition overseas of their products.

The Export Intelligence Service used by Thermatic (see other article) has initiated film of British exports.

The Market Entry Guarantee Scheme is aimed specifically at small and medium sized firms breaking into overseas markets for the first time or launching a new export initiative. The BOTB will advance between £20,000 and £150,000 to finance half the cost of overheads such as setting up an overseas office, hiring staff, travel expenses and sales and promotional material. In return it makes a 3 per cent flat rate charge plus a levy on sales—calculated to give the Board its money back plus interest. If the venture fails, the Board funds any shortfall in repayment.

"BOTB Services Booklet, BOTB Unit, 1, Victoria Street, London SW1H 0ET. Free."

A management buy-out?

Seeking long-term capital for expansion?

If yours is a profitable operation and you need long-term capital to fund a buy-out from your parent company—or for any other reason—Gresham Trust could provide the necessary finance.

Naturally you'll want the finance packaged in the way that best suits your needs. But how can you be sure you've got it if you haven't found out what Gresham can offer?

Gresham Trust plc, Barrington House, Gresham Street, London EC2V 7HE. Tel: 01-606 6474.

Gresham Trust

The competitive alternative for long-term capital

1st Class Hotel & Villa Development

CAPITAL REQUIRED

Quality Leisure Complex comprising Hotel, Club, Villas, etc. on 4,000 acre site in Andalucia

Capital and/or loans required, part or fully subordinated, to secure return long or short term

Write Box F4322, Financial Times 10 Cannon Street, EC4P 4BY

BRITISH EXECUTIVES

WILL REPRESENT UK INVESTORS IN LOCATING COMMERCIAL REAL ESTATE IN U.S. Our interior design office will locate suitable executive accommodation

ANTCO INTERNATIONAL

444 Grand St., Paterson, NJ.

Telex 710-988-5977

MANAGEMENT COURSES



London
Business
School

MANAGING INFORMATION TECHNOLOGY IN FINANCIAL SERVICES

A residential course, 4th-9th March 1984.

For middle and senior managers in financial services, and senior technical and telecommunications staff interested in IT for financial services.

It has rapidly become the key to strategic innovation and renovation in the financial services marketplace. This programme focuses on the management process for exploiting IT. The main topics include the electronic marketplace, strategic components of the technology, managing systems development and organisational change, and key policy issues. Participants will be provided with examples of effective strategies and guidelines for policy decisions in this area.

Inquiries: Miss Marie Wright, Programme Registrar, London Business School, Sussex Place, Regent's Park, London NW1 4SA. Telephone 01-262 5050 ext 356.

EIU The Economist Intelligence Unit

Special Report No. 105 (Updated to March 1983)

Tax havens and their uses

As taxes steadily eat their way into corporate profits and disposable personal income, tax havens offer an opportunity of avoiding some or all of the burden. It shows what individual havens offer to both companies and individuals.

Price £30. Payment with order please to The Economist Intelligence Unit Limited, Subscription Department (FT), 27 St James's Place, London SW1A 1TE. Telephone: 01-493 6711

FINANCE AND VENTURE CAPITAL FOR GROWTH COMPANIES

BSI has substantial funds for investment in companies with potential for growth. Management expertise available. It requires Alternatively, private or institutional investors to invest in SSI.

Substantial profits possible for shareholders. Confidential. Write to Box F4322, Financial Times 10 Cannon Street, EC4P 4BY

MY ONLY ADVERTISEMENT

With branches in the North West. Substantial consumer credit/ personal loan business which can be profitably run with a minimum of staff.

Mr Stubbs 01-637 3611 Ext 162. Noon - 3 pm Daily. Will answer telephone change for securities.

NEW PRODUCTS

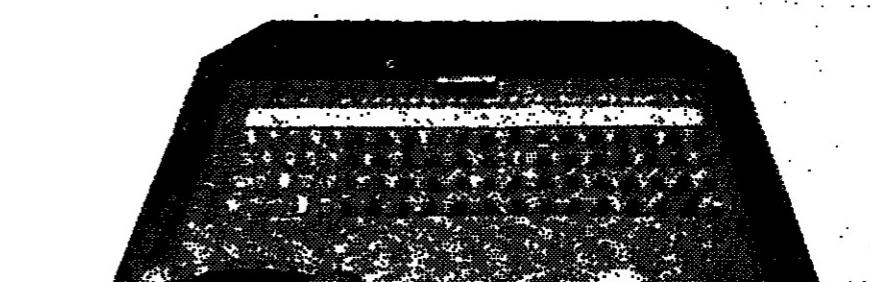
We specialise in finding partners for companies offering/seeking Management Consulting Services and Technology Exchange Agreements also Joint Ventures and Company Sales.

LLOYD READER ASSOCIATES

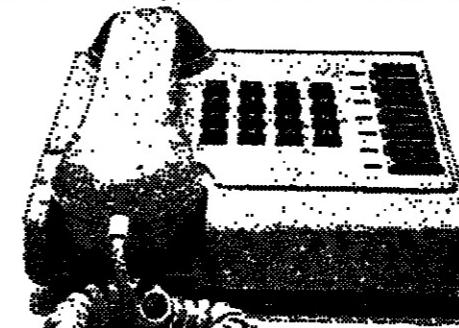
64 Blundell Lane, Borehamwood, Herts. Tel: 0628 26576

READERS ARE RECOMMENDED TO TAKE APPROPRIATE PROFESSIONAL ADVICE BEFORE ENTERING INTO COMMITMENTS

Would you prefer 5 lines X 20 extensions...



or 5 lines X 20 extensions



APPROVED for use with telecommunications systems run by British Telecom. Instructions in the instructions for use BT 59/207/3/C42/122

Please send me more information on Keylink

Name _____

Position _____

Company _____

Address _____

Number of exchange lines needed _____

Number of extensions needed _____

KEYLINK

Reliance Systems Limited, Turners Mill Lane, Wellingborough, Northants, NN8 2RB.

Telephone: Wellingborough (0933) 227122

Business Opportunities

READERS ARE RECOMMENDED TO TAKE APPROPRIATE PROFESSIONAL ADVICE BEFORE ENTERING INTO COMMITMENTS

Joint Venture

A New Zealand company seeks a UK partner to introduce a unique product and service for the protection of buildings against vandalism.

The system is suitable for the establishment of a network of owner operators throughout the whole of the UK with possible further European expansion.

A director will visit the UK early in February 1984 for discussion with interested investors.

Replies to: UK executive secretary, (New Zealand joint venture).



Thomson McLean & Co
70 Finsbury Pavement London EC2A 1SX

OVERSEAS COMMODITIES LIMITED
2 LONDON WALL BUILDINGS, LONDON EC2M 5PS
01-888 8276 Telex 88387 Comodit G

Established in the City of London since 1947

We are seeking the assistance of keen and experienced counter parties in expanding our domestic and international trading activities in raw materials and edible products.

Please write to reference GF

PATENT MEDICINES AND TOILETRIES

Pharmaceutical group wishes to purchase patent medicine or toiletry trade names and/or rights to manufacture, market or distribute.

LEDGER AND CO., Chartered Accountants
104 Tib Street, Manchester M4 1LR.

IBA 100% TAX RELIEF IN TAX YEAR 1983/84

- ★ Last few units — from £30,000
- ★ Mortgage finance available
- ★ Income guaranteed by Local Authority

Contact: S. A. Barnes

Druce House
21 Manchester Square
London W1A 2DD
(01) 486 1232

ENORMOUS PROFIT POTENTIAL

Midlands Software House established in micro market place 5 years requires investor on share basis to expand market opportunities for its range of proven application packages.

- Company owns exclusive copyright on all products
- Uniform standard of presentation
- Portability across major micros including IBM, SIRIUS
- Full use of latest technology such as colour
- Vertical market packages including HOTEL/CATERING, BUILDING & PRINTING INDUSTRIES, INSURANCE BROKERS

Reply in first instance to Box F437
Financial Times, 10 Cannon Street, London EC4P 4BY

DO YOU NEED MONEY ?

£10,000—£3,000,000

has been raised for our clients' realistic business propositions or property schemes by careful analysis, presentation, letter of intent and detailed sources of finance. We can assist you!

PROPERTY & FINANCIAL CONSULTANTS LTD

63 Coleman Street, London EC2 - Tel: 01-828 4245 - Tel: 01-828 4240

For an honest discussion without obligation, please contact:

01-828 4245 - Tel: 01-828 4240

Business Opportunities Report, 35 Dover Street, London W1

UK AND EUROPEAN SALES REPRESENTATION

We have a qualified sales team with the capability and capacity to sell additional products in the UK and European markets. We seek British manufacturers of mechanical power transmission, hydraulic and pneumatic products to add to our product portfolio. Agency or distribution basis considered.

Write Box F437, Financial Times

10 Cannon Street, London EC4P 4BY

VIEWDATA PRINTER

Microelectronic development company now concentrating on other projects wishes to sell or licence low-cost Viewdata printer.

Write Box F4331, Financial Times
10 Cannon Street, London EC4P 4BY

INDOOR SPORTS COMPETITIONS

Follow Financiers required to promote and arrange national pool and Dart competitions.

Please contact Miss James

0456 3901

INVESTMENT OFFERED

Scotiabank Director willing to invest in Scottish Financial Property or Manufacturing Company

Please reply with details and financial information to:

TURLAND LTD.
44 Melville Street
Edinburgh EH3 7HF

SWITZERLAND

INVEST IN SWISS REAL ESTATE

The Swiss Franc is one of the world's strongest currencies. From as little as US\$80,000 you can become an owner in one of the most beautiful countries in Europe.

Credit facilities up to 70% at only 8% interest. Your apartment is fully managed and income producing. We believe this to be an excellent property investment both as a second home, and as an investment for the future.

Fly or call for free information and inspection visit. If you buy an apartment the full cost of the trip will be reimbursed.

To receive the complete facts, write to us or send us the following coupon:

PROFINVEST, SA, 84 rue du Rhône, Geneva 1204, Switzerland

Name _____

Address _____

Office Telephone No: _____

Residence Telephone No: _____

LICENSED DEPOSIT TAKER

Our clients wish to acquire a controlling interest in the share capital of a licensed deposit taker

Interested parties should write to:
Box F4292, Financial Times,
10 Cannon Street, London, EC4P 4BY

REMOVE THE BURDEN OF CORPORATION TAX

Our successful and profitable corporate clients now arrange their affairs, with our assistance, so that they pay little or no corporation tax.

This can be done with virtually NO RISK and will result in a substantial increase in asset value accumulated in the company. For full details, without obligation, just write your name on a company letterhead and post to me today.

Managing Director (Dept. FC2)
'ACKRILL, CARR & PARTNERS LIMITED
Tricorn House, Hagley Road, Birmingham B16 8TP
(We regret no telephone enquiries can be accepted)

HEALTH & LEISURE PRODUCTS

We are the originators of a unique library of video and audio cassette programmes ideal for distribution through the health, fitness and leisure market. Courses are currently available on the control of weight, stopping smoking, relieving insomnia and reducing stress and tension. Audio programmes include a sport improvement series featuring world sports personalities. Hodge, etc.; others are being developed.

We wish to appoint an exclusive national and/or international distributor.

Telephone: 0223-210371 10 am till 4 pm or 0440-61357 eve.

or write to Chief Executive
6 Kingston Passage, Newmarket, Suffolk, CB8 8EN, U.K.

CABLE TELEVISION

A major British company with particular strengths in Design, Engineering, Project Management and Construction seeks to expand its participation in Cable Television Developments throughout the United Kingdom in conjunction with potential franchise applicants of equal substance and integrity. Any response will be treated in strict confidence.

Write Box F4322, Financial Times, 10 Cannon Street, EC4P 4BY

BAG-IN-BOX

An exceptional opportunity to distribute America's leading pumping system for dispensing bag-in-box beverages in bars, hotels and fast food outlets throughout the UK, Europe, Africa, the Middle and Far East. They must be well established companies with excellent references and contact with beverage producers and catering equipment manufacturers. Our bag-in-box pumping systems will handle wine, ciders and other soft drinks, beers and milk. Sales growth in the USA and UK is already phenomenal.

Full details from:
Robin L. Marsh, Sharpe International Limited
Walnut Tree House, Woodbridge Park, Guisborough, North Yorkshire, TS10 1EL, UK
Telephone: (0693) 502020 - Telex: 852824 CTL G

Football Supporters Group

with international links offer directorship and equity interests in sections to be formed nationwide for liaison only, suitable for mature persons, semi or retired business and professional men, managers/specialists and companies interested in lucrative and rewarding full/part-time engagement or side line. No direct investment required. Reliable applicants with good references contact:

MR PETER HORNER
46 Langbank Avenue, Coventry CV3 2PN

BUSINESS EXPANSION SCHEME

Funds required for Engineering consumable item. Market assured

Client: MoD, Philips, etc. No charge to investors

Please reply in the first instance to:

(BES) PETER CRANE & COMPANY
7 Cheltenham Place, Newquay, Cornwall TR1

BUSINESS OPPORTUNITY

Public company are seeking a successful Commercial Lighting

Company managed by a live entrepreneur to join an existing lighting division with a view to mutual development and expansion

Write to Box F4329, Financial Times
10 Cannon Street, London EC4P 4BY

MOULDS FOR SALE

Complete line of houseware and food containers including pans, trays, laundry baskets, waste baskets, basins, dinnerware, tableware, plastic containers, makers, cutlery, colanders, pots, stools, pasta tables, utility items, etc. Moulds available from one to multi-cavities. Moulds for bread, cake, fruit, vegetables, etc. on hot basis and not thermally. Complete line of moulds relatively priced.

These moulds can be a valuable asset to an existing independent contractor or to one looking for an opportunity to expand sales with full houseware and furniture lines.

For further information contact:

Blackford Inc., Box 639, Rawdon, Quebec J0A 1E0, Canada (514) 834-2277

NEW LICENSING OPPORTUNITIES

Monthly publication reports on new product licensing opportunities (and joint ventures) from all over the world.

Write Box F4329, Financial Times

TECHNOLOGY TRANSFER INC.
15 Selby Lane, London NW7 3SS

Telephone: 01-927 73722

E-mail: FCR@BT.COM

RECORDED MAIL

BUSINESS SERVICES



MARKET PENETRATION IN FRANCE

Exe Limited, by meeting potential customers for your product range, can identify through first hand commercial information the most important market segments. Subsequently we can recommend the most effective method of exporting to them and help you set it up.

Write to Robert Heath, Exe Limited
14 Rue Robert, 69006 Lyon, France - Telex: 305080F

FOR PEOPLE WITH DRIVE CARPHONE

No-one knows more about telephones than Carphone - and no-one is better placed to show you how your business could benefit from selling phones or telephone equipment, the right model to suit your needs. Direct Dialling from your own car costs as little as £1.25 per call. And our office-to-office check-out is not to mention the highest quality installation work.

- All models Direct-Dial
- 24 hour service with car collection and delivery
- Fully trained installers, our specialist PART EXCHANGE - Yes! We'll even exchange your old car in part exchange. For full details, call now, ring:

0923 40347

CARPHONE
CONSULTANTS
18 Upper Road,
Watford, Herts
Tel: 2955587
WIMPS G

"Cost based on
agreement."

YOUR OFFICE IN LONDON MAYFAIR LOCATION

From £69.50 per month
Ideal set-up for those starting a new business or needing part-time use of offices. Full secretarial, executive support, telephone answering, facsimile, mail, word-processing etc. Companies formed if required.

For brochure telephone:
Lloyd Adams 01-499 0321
or write Box F3590, Financial Times
10 Cannon Street, EC4P 4BY

DATASEARCH The specialists in Japanese business information.

SEARCHES • PROFILES • RESEARCH
UK • EUROPE • USA • FAR EAST

Tel: 0225 60526
Datasearch Business
Information
II Kingsmead Square, Bath BA1 2AB

HUGE SAVINGS

Professionally designed product and prestige brochures using latest technology.
Eg. 3,000 20pp A4 Brochures up to 100 colour pictures £6,900 or 8pp with 40 pictures £2,500.

Gordon Phillips Ltd,
Springwater House, Taft's Well,
Cardiff CF4 7OR. Tel: (0223) 810940

WORLD MARKETS

Introduce marketing strategy into your export business specifically if you are a small or medium size company.

Please write with details to:
Worldwide Business Portfolios Ltd
Norham House, 12 New Bridge St
Newcastle NE1 8AS

£2 A WEEK FOR ECR ADDRESS combined with phone messages and telex under direct control. Weekly reports, monthly financial statements, international, Mt. 628 0598, Tel: 881 1725.

LAWYERS, ATTORNEYS & COMPANIES
SEARCHERS. Very fast service. Credit cards accepted. No. 377 1474.

COPIERS, FACSIMILE, TELETYPE, GROUPS, ETC. Service offered by BURGESS. Many companies available. Tel: 01-377 4836.

CHARTERED ACCOUNTANT, IMMENSELY furnished and immediately available. Tel: 01-377 5306. Private telephone.

MAIL TELEPHONE TELEX service from 522222. Tel: 01-836 2862.

MAIL TELEPHONE TELEX service from Cranbury Street, WC2. Tel: 01-836 2862.

VISITING JAPAN? VISITORS FROM JAPAN?



Giving gifts is all important. We've made the right gift for business. Typically British and just what the Japanese recipient will receive with lasting pleasure. Write or telex today for full details to: Gulf in the Making Ltd, The Burge Walk, East Molesey, Surrey KT8 9AZ. Telex: 21341 BCG.

* Ideal promotional items for St. Andrew's Day.

COMPANY FORMATIONS £100

Our complete Company Formation Service includes nearly made companies for £100. Full secretarial, executive support, telephone answering, facsimile, mail, word-processing etc. Companies formed if required.

For brochure telephone:
Lloyd Adams 01-499 0321
or write Box F3590, Financial Times
10 Cannon Street, EC4P 4BY

DATASEARCH The specialists in Japanese business information.

SEARCHES • PROFILES • RESEARCH
UK • EUROPE • USA • FAR EAST

Tel: 0225 60526
Datasearch Business
Information
II Kingsmead Square, Bath BA1 2AB

OFFSHORE TAX ADVANTAGES

Non Resident Limited Companies £110.
Confidential Qualified Adviser.
Secretary, Accountant, Auditor,
Director, Secretary, Auditor, Tax
Adviser, Lawyer, Accountant
Worldwide.

Offices Ltd, 200 Regent House, EC1
Tel: (0124) 262120/289313/276240

MORTGAGES

on Commercial, Industrial,
Residential Properties
at competitive rates

HIRSCH MORTGAGE (INT'L) LTD
Europe's leading Mortgage Brokers
5 Berkeley Street, W1C 4BS

Tel: 01-625 5051 - Telex: 26274

FINANCE + MORTGAGES

Personal Mortgages, Commercial
Loans, Trade, Property Finance
Business Finance, Refinancing,
Bank accounts opened

SELECT COMPANY FORMATIONS
Mt Pleasant, Douglas, Isle of Man
Tel: 01-226 2290/2291/2292/2293
Telex: 628554 SELECT G

OFFSHORE & UK COMPANIES

READY MADE OR TO SUIT

Isle of Man, Caribbean, Liberia, etc

Full or part time management services

Bank accounts opened

SELECT COMPANY FORMATIONS

Mt Pleasant, Douglas, Isle of Man

Tel: 01-226 2290/2291/2292/2293
Telex: 628554 SELECT G

JEANS MANUFACTURER

The business and assets of VPR (Clothing) Limited are for sale:

- Major manufacturer of regular and fashion jeans.
- Turnover approximately £3.5 million p.a.
- Leasehold factory of 31,000 sq ft in Witney, Oxon.
- Workforce of 200.

Further information from C. Morris.

Touche Ross & Co.

Hill House, 1 Little New Street, London EC4A 3TR

Telephone: 01-353 8011 Telex: 261064

MOTOR AUCTION BUSINESS LONG SECURE LEASE

Annual turnover in excess of £8 million. Projected

fiscal year's profits £100,000 net.

Excellent location in

SOUTHERN ENGLAND
(Lease, goodwill, fixed assets)

£450,000

Write Box G9425, Financial Times

10 Cannon Street, London EC4P 4BY

EXCAVATOR AND ENGINE REPAIRS

Midlands based

Company engaged in excavator repairs, engine repairs and sale of

spares for the construction and allied industries

Turnover £1.5 million per annum

Recovery situation requiring cash injection. Company is a subsidiary

of a public company but operates outside the Group's

traditional activities

For further details apply in writing to Peat, Marwick, Mitchell & Co

(Ref. Dept. 55), Century House, Tib Lane, Manchester M2 6DS

FOR SALE

THE SPURR
MANUFACTURING GROUP
OF COMPANIES

IN RECEIVERSHIP

A Group of Companies, located in the West

Midlands and Yorkshire, is offered for sale

as a going concern by the Joint Receivers

and Managers R. A. Adams and R. Hocking.

The businesses of the Group include:

Design, Manufacture and Installation

of Colliery Process and Mechanical

Handling Plant for Industry.

Research Manufacture and Development

of Electronic Control Systems for the

Mining Industry, together with Weighing

Machine Manufacture.

Enquiries to the Joint Receivers, at the

address below. Tel: 021 643 4024.

Stoy Hayward & Partners

Waterloo House,

20 Waterloo Street, Birmingham B2 5TF

METAL PRESSINGS MANUFACTURER

OXFORD

THE ASSETS OF WARDRAY & CO LTD

ARE OFFERED FOR SALE AS A GOING CONCERN

The company manufactures Light Metal Pressings, supplying major Motor

Factories, Aircraft, Railways, Motor

Manufacturers, etc. Excellent Press capacity to 120 tons.

Total Toolroom capacity 20,000 sq ft, its single storey Freehold Property

on 1.75 Acres. Turnover 1983 £3 — £860,000.

Good forward orders (£120,000 for February delivery)

Reasonably priced for urgent sale

For further details contact:

C. J. C. Derry

Business Brokerage Department

50/51 High Holborn

London WC1V 6EG

Tel: 01-405 8411

HENRY BUTCHER

Leicester

COMMERCIAL BIOTECHNOLOGY

Where the U.S. sees the threat to its lead

By David Fishlock, Science Editor

THE U.S. has mounted a massive commercial effort to exploit biotechnology, an advanced technology which promises answers to some of the world's most pressing problems, such as disease, malnutrition, pollution and low-cost fuel. Yet it fears that Japan will repeat its success in consumer electronics and overtake the present clear U.S. lead.

Other countries are not considered to be in the running. Britain is thought to lack the "dynamic" necessary to get the best from such a broad-based technology. West Germany has problems in getting its academics behind biotechnology. France lacks the academic base needed.

This, in a nutshell, is the picture which emerges from a 600-page study of commercial biotechnology, commissioned by the U.S. Congress from its Office of Technology Assess-

The hurdles that innovations must surmount

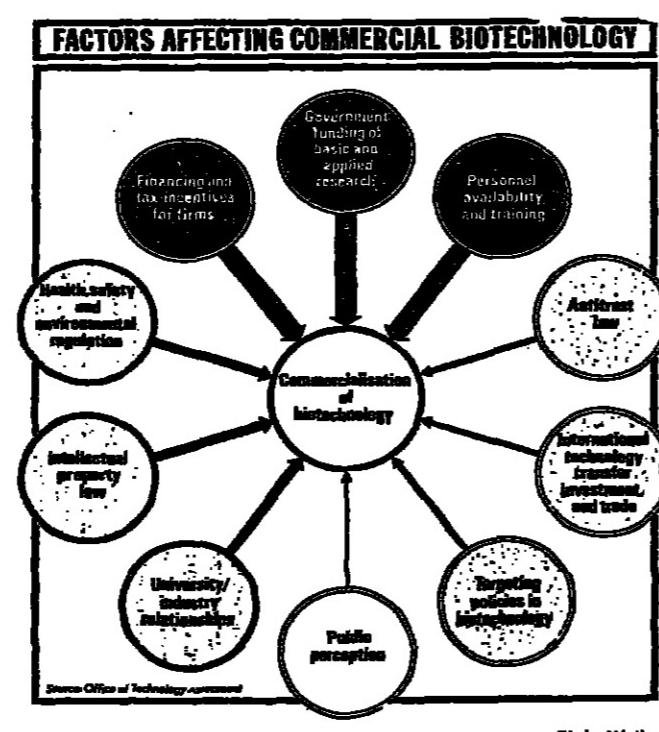
ment and presented to Congress last week. It analyses the reasons why the U.S. leads today, and the chances of the U.S. retaining the lead.

It is what it calls "new biotechnology" for much biotechnology like the making of bread, beer and wine has ancient origins. New biotechnology aims to use scientific discoveries, techniques and inventions of the 1970s and since, such as the techniques of "genetic engineering".

Traditional winemaking is old biotechnology. But winemaking with a genetically modified yeast that allowed the wine to have, say, a higher alcohol content would be new biotechnology. It means building into the yeast a resistance to alcohol, which normally kills it at about 12-14 per cent.

Last year, U.S. investors in the private sector put \$1bn in small groups of scientists who had bright ideas for using genetic engineering to gain greater control over some such biological systems. For example, they might propose to induce it to mass-produce pure interferon or insulin, or to give plants more resistance to frost or pests.

The report says available of venture capital to start such new biotechnology firms



established Japanese companies in the field have at least one bank as a major shareholder, providing low-interest loans for R & D. Wealthy individual investors in Japan, although few in number, have also provided some risk capital.

Japanese companies began investing in new biotechnology only in 1980, in response to the overseas threat to its pharmaceutical industry. Since then, more than 150 companies have rapidly reorganized their R & D systems, equipped research institutes, and recruited new staff to evaluate the applications of biotechnology.

In 1981, MITI announced a 10-year plan to promote "next-generation" industrial biotechnologies, focusing on bioreactors, genetic engineering and mass cell culture. It invited 14 companies to participate. MITI is providing over \$100m but 90 per cent of the R & D will be done in industry.

Five other Japanese government agencies are also funding biotechnology, and between them the Government provided \$67m last year, mostly for applied research.

The report comments on the "truly extraordinary" ability of Japanese companies to rectify shortages of skills by retraining. It found that in 1981

it says government support in 1982 roughly equalled the level of spending found in Japan, Germany and France.

Britain's tax laws tend to favour established companies rather than NBFs. It has the largest and most rapid depreciation allowance of capital expenditures for scientific research of all the potential U.S. rivals in biotechnology. But for the NBF, both the taxation of long-term capital gains and the 30 per cent band of income from sales of "technology" are the most unfavourable of the competitor countries."

It estimates that between 100 and 1,500 "experts in some aspect of biotechnology" have brain-drained from Britain in the past few years—an indication of the uncertainty here. Of these, 13 had gone to one NBF alone, Biogen in Geneva.

Although the study finds Britain has the potential to be a major competitor to the U.S. because of its strong research base and government interest, it is hampered by what "appears to be a lack of entrepreneurship."

Switzerland: Three major Swiss pharmaceutical groups—Ciba Geigy, Hoffmann-La Roche and Sandoz—together with Biogen constitute an "impressive national potential in biotechnology," the report concludes. Swiss drug companies sell 10 per cent of the world's pharmaceuticals and are backed by a strong university research system.

Low corporate tax rates—the lowest in Europe—are favourable to established companies. Swiss anti-trust laws are no problem for R & D joint ventures. The big drug houses conduct much of their R & D in other countries but the academic system in Switzerland draws talent from other countries. The report concludes that, given the new government focus on biotechnology, Switzerland is a commercial force to be reckoned with.

France: France is currently in a less favourable position to compete with the U.S. and Japan than the other European countries already discussed, the report finds. It concludes it lacks "market pull" given its lack of basic research programme in molecular biology, geared to find a cure for cancer.

It believes that NBFs currently face a very different, and much more complex, market environment than did the new entrants to semiconductors in the wake of Bell Laboratories' discovery of the transistor.

* Commercial biotechnology: an international analysis. U.S. Government Printing Office, Superintendent of Documents, Washington DC 20402.

advanced technologies. France has the most highly co-ordinated policy of any of the six leading nations in biotechnology, the report finds.

Commercially, it "lags somewhat behind" the five already discussed. But if it can boost its manpower, "French industries could well gain a competitive footing in selected product markets."

Other competition: The report also discusses several countries not considered to be in the first league commercially yet which are active in biotechnology. Sweden has bright ideas but "negative Swedish public attitudes" towards genetic engineering have inhibited progress.

Canada has designated biotechnology as a priority target but is short of people and of experience in getting government, universities and industry to collaborate. The Soviet Union is seen to have one major advantage over the capitalist system in that R & D is prompted from inception through to production and distribution. Brazil is the only developing nation with a

Semiconductors: the similarities and the differences

government policy for biotechnology but is short of people and capital.

How close is the parallel between the new biotechnology of the 1980s and the emergence of the U.S. semiconductor industry in the 1960s? This is a question of consume interest to investors.

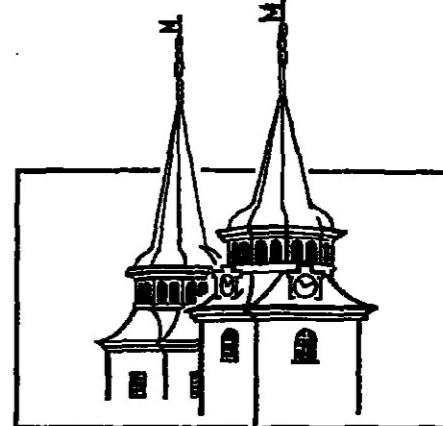
The study finds some similarities but bigger differences, chiefly because "biotechnology is not an industry but a set of technologies that can be put to use by many industries."

It concludes that, whereas "market pull" gave the big impetus to semiconductors, in biotechnology the impetus has been "science push" from a big U.S. basic research programme in molecular biology, geared to find a cure for cancer.

It believes that NBFs currently face a very different, and much more complex, market environment than did the new entrants to semiconductors in the wake of Bell Laboratories' discovery of the transistor.

SPAREBANKEN OSLO AKERSHUS

The bank that gives top priority to Norwegian kroner spot and forward.



**SPAREBANKEN
OSLO
AKERSHUS**

Forex and Treasury Section
Tel: Oslo 3185 28-30. Telex: 76463 spark.

Capital Market Section
Tel: Oslo 3190 50. Telex: 19968 spark n.
Tordenskiolds gt. 8-10, Oslo 1, Norway Tel: 472 3190 50.

FUTURE SHOCK

 Forget science fiction dreams about the day when pancake-flat, solar powered cars will zip along highways on cushions of air.

Future evolutions will be defined by the practicalities of economics.

The next ten years will see cars very much like the prototype shown in the photograph.

The Renault *Vesta* doesn't look especially futuristic. But it achieves a very futuristic aerodynamic drag coefficient of 0.22, and could attain a dreamy 79 mpg.

Working hand in hand with technological pioneers like France's *Société Nationale des Industries Aéronautiques*, maker of the Airbus, Renault is continually turning advanced engineering theory into practice.

And making tomorrow's economic performance a reality.

The future is around the corner. Already today, Renault cars achieve the lowest average fuel consumption, at 35 mpg, of all cars in the world.

And that's fact, not science fiction.

RENAULT
WE'RE HERE



X 1984

FINANCIAL TIMES

BRACKEN HOUSE, CANNON STREET, LONDON EC4P 4BY
Telegrams: Finantimo, London FS4. Telex: 8854871
Telephone: 01-248 8000

Tuesday January 31 1984

Murder in Madrid

THE assassination in Madrid of Gen Guillermo Quintana Lacaci shows once more how vulnerable democratic states have become to determined bands of killers. Whether it is the IRA in Britain, extremists of Left or Right in Germany and Italy, or gunmen from the Middle East in Austria, their murderous activities have not been prevented by the police.

So much should be firmly noted before examining the question of whether Spain is especially vulnerable and more important, whether there is reason to fear for the stability of a country that emerged from dictatorship less than 10 years ago.

The answer to the first question, as to the vulnerability of Spain, has to be in the affirmative. The country has a tradition of political violence. Memories of the civil war in the 1930s are still alive. It has to contend with the aspirations of minority groups, especially the Basques, who have fretted for centuries under centralist rule from Madrid.

In addition, powerful elements in the officer corps have not come to terms with democracy and with civilian control over the forces. They attempted a serious coup in February 1981 and another in October 1982. Dissatisfaction among some officers in conjunction with Basque terrorism may be an especially dangerous mixture.

By striking at individual officers the terrorists hope to encourage the military hooligans and thereby weaken the civilian Government. It is not clear whether this has happened in the case of Gen Lacaci: the police suspect that he was killed by Basque terrorists in order to demonstrate that Basque terrorism still needs to be reckoned with.

The Government may also be moving the soldiers towards a reconciliation with the democratic system by playing down its opposition to Spanish membership in Nato. The undertaking to submit the matter to a referendum stands, but Spanish ministers have watered down their intention to quit the alliance.

The Gonzalez Government has handled the armed forces with firmness and skill. The process of fitting the forces into a democratic state has begun. The Government will have to pursue this objective with undiminished determination. Its friends in western Europe can help by not placing unnecessary obstacles in its way, especially in the negotiations for admitting Spain to the European Community.

Finance for small UK firms

THE Business Expansion Scheme, which was introduced in 1981 as the Business Start Up Scheme, has proved to be one of the British Government's most imaginative ideas for helping small businesses. But in recent weeks the number in which it is being used by some operators has attracted uncharitable publicity, raising questions which the Chancellor may have to answer by tightening up the rules in his forthcoming Budget.

One of the difficulties for policymakers at this stage is the shortage of evidence with which to judge the success of any of the Government's measures to assist small firms—and the BES, which provides income tax relief on up to £40,000 of shares subscribed by individuals in most unquoted trading companies, is no exception.

It is already clear that the BES has been much more effective than the original Start Up Scheme (which limited relief to investment in companies which had been trading for up to five years). Most conspicuously it has spawned a large number of managed funds which collectively have pulled in more than £30m from private investors.

This is a large pool of money for investment in the ordinary shares of unquoted UK businesses, much greater, for example, than last year's equity commitments by ICFC, the leading supplier of long-term funds for small companies.

There is little doubt that it would not have been raised but for the Government's decision to increase the individual subscription limit to £40,000 a year and, crucially, to extend the relief to established companies as well as the riskiest areas of start-ups.

Unseemly scramble

Three developments, however, give cause for concern. Many of the BES fund managers have promised to invest their money before April 5 to ensure that the private investors for whom they are acting get tax relief on 1983-84 income.

It would do the BES no good at all if there is an unseemly scramble ahead of this artificial deadline to throw money at any

PRESIDENT Ronald Reagan has finally made it official. After a "difficult personal decision," he has let the American people in on one of the worst-kept political secrets of the decade—he is to run for a second term in the White House in this year's November elections.

To suggest that anyone in Washington yesterday was mildly surprised would be an overstatement. Mr Reagan has for months looked every inch a candidate. But he managed to squeeze the last drop of drama out of what might otherwise have been a run-of-the-mill announcement by delaying it for so long—it was originally billed for early in September—and engaging in a teasing public game of hide-and-seek that left just the slightest nagging doubt about his real intentions until the last minute.

Now it is easier for the fray. Since last week's upbeat State of the Union address, Mr Reagan has been in a combative electioneering mood. Newsweek magazine shows him happily limbering up his hand-shaking muscles with a special fist-fight exercise device, and for a man who will be 73 next Monday he is by all accounts in excellent health. (His age is probably less of an issue now than was in 1980.) For two months now, money has been flowing from his campaign coffers—\$4.2m at the latest count—and over 2m more fundraising letters were mailed to the weekend to arrive immediately after Sunday night's announcement of his intentions.

His timing could not, as it turns out, have been better. He has cut the tape on the 1984 election season, riding a new wave of national popularity that makes him, according to more than one opinion poll, the most respected White House incumbent after three years in office since President Dwight D. Eisenhower in the mid-1950s.

Unlike most of his predecessors, Mr Reagan's approval rating has climbed during his third year after hitting an all-time low 12 months ago in what was inevitably dubbed "the winter of discontent." He is likely to be the first incumbent president, again since Eisenhower, to face no opposition for his party's nomination.

It is not, however, going to be all downhill from here. While his personal popularity may be on the rise, thanks largely to economic recovery, the process of fitting the forces into a democratic state has begun. The Government will have to pursue this objective with undiminished determination. Its friends in western Europe can help by not placing unnecessary obstacles in its way, especially in the negotiations for admitting Spain to the European Community.

Some of his opponents argue that he has polarised the country so sharply between the haves and the have-nots that this will be the first class election in the U.S. in living memory. Mr Reagan's White

House aides would not put it quite like that. "It's a battle for the economic middle as well as the political middle," says Mr Richard Wirthlin, Mr Reagan's pollster.

Foreign policy would not ordinarily be expected to play a dominant role in a peace-time American presidential election. But this time there is an intensely emotional, and visible, focal point for national anxiety—the U.S. Marines in Beirut. Large because of mounting misgivings over Mr Reagan's handling of the Lebanon prob-

lem, 50 per cent of respondents to one poll this month gave him a negative rating for his management of foreign affairs—as low as at any time in his presidency.

The same people who give Mr Reagan overall approval ratings of 54 or 56 per cent say by majorities of around two to one that he must bring the Marines home.

Mr Reagan's main immediate concern on the economic front, however, remains the budget deficits, now running at about \$180bn a year, which he had pledged to eliminate altogether by now in his 1980 campaign. Tacitly at least he acknowledged his sensitivity on the issue last week by appealing to the Democrats to share responsibility with him in tackling them.

But while the Democrats can be expected to keep on pounding away at the deficits, they are finding it harder to attack Mr Reagan on the current state of the economy. In general, much of their fire is accordingly

now being directed at what is generally acknowledged to be one of Mr Reagan's weakest points—foreign policy.

The polls show that many Americans blame the Soviet Union more than Mr Reagan for increasing world tension, and believe that he has made the U.S. a "safer" place as he claims. But the euphoria that followed October's Grenada invasion has waned, and a clear 60 per cent earlier this month

are also fears that Mr Reagan

for having restored American strength and self-respect worldwide and revived the sagging morale of the armed forces—all of which he can claim he was elected to do in 1980.

Mr Reagan has changed the climate of political debate to the extent that not even Mr Walter Mondale, his supposedly "liberal" main Democratic challenger, wants to be seen as "soft" on defence. By the same token, Mr Mondale is energetically trying to avoid being cast as a traditional Democratic "big-spender," whose policies would exacerbate the budget deficit.

What unites the Democrats today is a fervent conviction that Mr Reagan can and must be beaten before his economic, social and educational policies do irreversible damage to the fabric of American society, and they would add, the prospects of the next generation. This is at the heart of what has become known as the "fairness" issue.

Mr Reagan's perceived favouritism of the rich over the poor, the powerful over the weak, the polluter over the polluted. This is what has motivated organisations like the AFL-CIO, the country's largest union federation, to bury past differences in favour of an unprecedented, concerted drive for Mr Mondale.

Mr Reagan's advisers privately concede that the Democrats are more unified on this domestic issue than which calls the whole nature of his leadership into question. They claim he has not achieved any major foreign policy breakthroughs in the past three years in the White House.

If Mr Reagan can successfully extract the Marines from Beirut and muddle through in Central America, he may be able to defuse some of this opposition. He will in any case take credit

either his closest advisers or well-wishing supporters.

The American dream has come true relatively painlessly for Mr Reagan, who started life in a humble small town in the Mid-West. He sometimes gives the impression that he finds it hard to grasp how rough life can be for others not necessarily through any fault of their own. He firmly believes that the capitalist system will look after those who embrace it warmly enough.

The Republicans dispute Democratic claims that such Reaganite attitudes have bitterly polarised the nation. Both sides were exchanging competing figures to prove their point at the weekend, with Mr Reagan's pollster claiming that those "strongly disapproving" of him have now dwindled to less than 20 per cent of the electorate. The Democrats say that a "hard core" of Reagan supporters, composed of about 35 per cent of the voters, is confronted by a slightly larger group of 38 per cent who are "utterly opposed" to him.

The Republicans admit that come polling day, they will have to win over a considerable number of the more numerous registered voters of 1980 and recapture the several million mainly younger, better educated, middle income voters who deserted Mr Reagan for the Democrats in the November 1982 mid-term election—an objective that is by no means out of reach.

Mr Reagan has little chance of holding even the 10 per cent of black voters he won in 1980. And for months now he has been energetically wooing the growing Hispanic vote instead. He still suffers from the notorious gender gap, where women are approximately 9 per cent lower among women than men—another item of considerable concern to the White House strategists.

Mr Reagan has a big lead in rural areas—particularly in the "wide open spaces" of the West. The Democrats lead in the large cities, the East and their traditional southern stronghold. Suburbs and small towns, according to one pollster, are fairly evenly split.

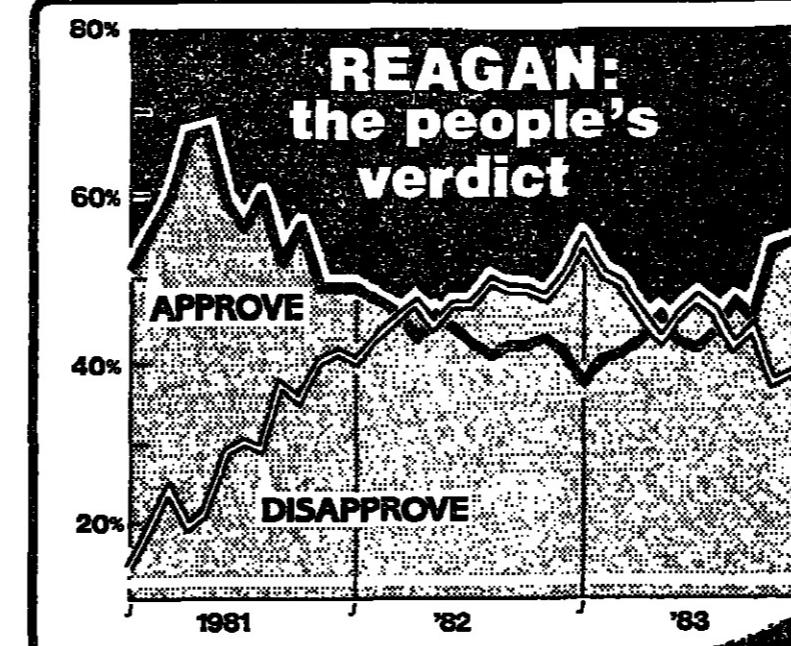
All these factors could make the race closer than Mr Reagan's recent buoyant approval ratings might suggest. The Democrats believe that if they can turn it into a sufficiently "big stakes" election they can mobilise previous apathetic voters and reverse the declining turnouts of recent years—after all, 53 per cent of Americans claim to be Democrats.

Mr Reagan, however, starts with a number of high cards in his hand, and he can be relied on to play them with all the skills of timing and attention-grabbing that he has displayed in the past. Yesterday, the Reagan camp was cock-a-hoop about the prospects. But a note of warning was struck by Senator Paul Laxalt of Nevada. Mr Reagan's close friend and campaign chairman, "It's too good to be true," he said "and that makes me a bit nervous."

U.S. PRESIDENTIAL ELECTION

Mr Reagan's strong hand

By Reginald Dale, U.S. Editor in Washington



The most respected White House incumbent since Dwight D. Eisenhower

for having restored American strength and self-respect worldwide and revived the sagging morale of the armed forces—all of which he can claim he was elected to do in 1980.

Mr Reagan has changed the climate of political debate to the extent that not even Mr Walter Mondale, his supposedly "liberal" main Democratic challenger, wants to be seen as "soft" on defence.

By the same token, Mr Mondale is energetically trying to avoid being cast as a traditional Democratic "big spender," whose policies would exacerbate the budget deficit.

What unites the Democrats today is a fervent conviction that Mr Reagan can and must be beaten before his economic, social and educational policies do irreversible damage to the fabric of American society, and they would add, the prospects of the next generation. This is at the heart of what has become known as the "fairness" issue.

Mr Reagan's perceived favouritism of the rich over the poor, the powerful over the weak, the polluter over the polluted. This is what has motivated organisations like the AFL-CIO, the country's largest union federation, to bury past differences in favour of an unprecedented, concerted drive for Mr Mondale.

Mr Reagan, they say, is the first U.S. President since Herbert Hoover in the early 1930s not even to have met his Soviet counterpart. They claim he has not achieved any major foreign policy breakthroughs in the past three years in the White House.

If Mr Reagan can successfully extract the Marines from Beirut and muddle through in Central America, he may be able to defuse some of this opposition. He will in any case take credit

Men & Matters

Hodge's double

At 79 years of age Sir Julian Hodge, the Welsh financier, looks like pulling off a notable double if he succeeds in securing the full London stock exchange listing for the Commercial Bank of Wales early in April.

He will be redeeming a promise made to shareholders when he launched his idea for a Welsh "bank" more than 20 years ago: that it would have a full stock exchange quotation.

Finally, there is the key question of which ventures are now attracting support.

A clear picture has not yet emerged, but it appears likely that established companies—undercapitalised but with some track record—could attract the lion's share of the money. This is acceptable so long as finance available for start-ups does not dry up.

More controversially, a handful of promoters are aiming to use the Scheme to finance farming. For example, the Hill Samuel Group is in the process of trying to pull in up to £15m for a new company, Beechbank Farmers.

The farms which Beechbank buys will no doubt benefit from new investment and as long as the sums remain small other sectors are unlikely to suffer. It is nevertheless difficult to argue that farmers are a group the Scheme was intended to support.

There are other examples where BES funds have been channelled into property-backed enterprises which would surely have found willing investors without the Scheme.

It may be that these apparent distortions are a price worth paying for the general benefits of the Business Expansion Scheme. But the Government needs to examine whether it is feasible to tighten up the rules (without creating too much complexity) so that the original aims of the Scheme can be fulfilled.

when his activities were described by one writer as "getting into one sticky situation after another."

His Hodge Group, a sprawling empire of banking, hire purchase, and unit trusts, had just been reorganised with outside help. He had financed car buyers using such a muddled computer system that, as he admits, "We could not back-check on who had paid and who hadn't."

Hodge, a Labour Party supporter, and a devout Roman Catholic, had a dream. He would found a Bank of Wales, supported by the savings of the Welsh nation, to spearhead the industrial regeneration of the Principality.

When it came to pass in 1972 he had powerful political support. Cardiff MP James Callaghan, later to be Prime Minister, was a member of his original board. So was another Cardiff MP, George Thomas, who went on to be Speaker of the House of Commons.

But Hodge's "bank" was not in the full-blown form he had envisaged. The authorities jibbed at a Bank of Wales—it might be misunderstood abroad as being a central bank—and insisted upon another name. He was pressed to accept "Investment Bank of Wales" and settled for "Commercial Bank of Wales."

The new business had a difficult start in the 1970s and in 1981 was told by the Bank of England to stop calling itself a bank. But less than a year later the Bank of England relented and granted the Commercial Bank of Wales full banking status. Threadneedle Street liked the look of the flow of foreign funds into Cardiff.

Hodge said at the time, "All Wales will rejoice at the news." He identifies his forthcoming stock exchange listing just as strongly with the Principality.

Twenty years ago Hodge was admitting with a grin, "It was the incredible honesty of the British motorists that saved me from going right under." He was emerging from a period

would do all it could to shed more light on the affair—but did not say how or when.

Pecqueur deftly parried any attempt to find a scapegoat in either of his immediate predecessors, Albin Chalandon and Pierre Guillaumat. The group should be judged, he said, by all its activities and not by just one "painful" event eight years ago.

Owen's trip

At least the thought had Dr David Owen musing in Tokyo last night. There was the leader of the Social Democrats in the Japanese capital just as Nissan was beginning its final debate on whether or not to invest in the UK. Had he not, it was put to him, contemplated a Jesse Jackson-style mission from which he could claim the credit for bringing the Japanese car company to Britain?

Owen had to confess that he had not thought of it—though he has been discussing investment with other countries. He was yesterday meeting in the upper reaches of Japanese political society, meeting Prime Minister Nakasone.

Owen's mission, in fact, has been to get together with Saburo Okita, former Japanese foreign minister, and Zbigniew Brzezinski, Jimmy Carter's national security adviser, to hammer into shape a report for the Trilateral Commission (which groups together luminaries from the U.S., Europe, and Japan) on how to revitalise the global economy.

Owen would be "drawing consequences" from the scandal, Pecqueur said, but it belonged firmly in the past, a "limited" episode in the life of the group.

Considerable mystery still surrounds the FFR 500m Elif paid during the late 1970s for the electronic oil-detector method subsequently found to be worthless. Pecqueur promised that the company

Rudyard never kippled in such comfort.

Kipling would have waxed lyrical about Air-India.

Especially our First Class. Wide, deeply comfortable seats in which he could stretch out or curl up. An equally wide choice of the very finest Eastern and Western cuisine.

Beautiful hostesses

Letters to the Editor

The real reward of collaboration with the Japanese

From the Principal of Capito Technical Management

Sir,—Christopher Lorenz (January 18) rightly warns those contemplating collaboration with Japanese to think through the longer term relationship and to beware of situations inviting failure. He ponders too much, however, to the view, widely held in the West, of the Japanese as unpredictable, unreliable and even treacherous.

Having long worked in Japan with Japanese companies in numerous forms of collaboration both within and without Japan (in Europe and the U.S.), I can say with confidence that Japanese companies and individuals are no more unpredictable and often a lot less unreliable or untrustworthy than their parallels in the West.

Too few Westerners take the trouble to acquire the knowledge and understanding to make reasonable predictions or to understand expected or actual behaviour in Japan.

Japanese are much motivated by honour and "face". Short-term profit or loss is much less important to them. Any Japanese entering a collaboration with a Westerner would lose much face if the collaboration failed, especially were the failure to be attributable to the Japanese side. On the other hand, a collaboration is only valid while all parties to it share the contributions to it as well as the rewards in a fair



way. Hence a one-sided transfer of know-how or products is not really a collaboration but a transaction. It is inconceivable that Japanese would deliberately break up a successful collaboration.

Common sense dictates that one should only enter collaborations where one can do so from a position of relative strength. The preparation and presentation of a negotiating position is an art in itself, at which many Japanese are expert. Though some Japanese may seem to treat weak partners with contempt (attitudes not unknown in the West), they will often treat partners in a true relationship with exception.

Leadership of the ISTC

From Mr K. Hale

Sir.—Mr Brian Groom's commentary on Mr William Sirs' leadership of the Iron & Steel Trades Confederation (January 18) is an interesting reflection on how some commentators and the public at large perceive trade union leaders.

Actual experience of dealing with contemporary senior trade union officials does not always match popular perception as exemplified by simplistic labels such as "left wing", "right wing", "moderates" and "militant". Contrary to what Mr Groom evidently believes, I doubt whether there are many in the steel industry—either within the ISTC or outside it—which really feel that the union's stature has been enhanced by Mr Sirs' stewardship.

Mr Groom lays heavy emphasis on the internal cosmetic changes introduced in the union's structure by Mr Sirs, but rather less on the ISTC's actions during the 1980 steel strike, for which Mr Sirs must surely carry the prime responsibility. Mr Groom fails to mention entirely the ISTC's disgraceful conduct towards the privately owned sector of the industry which was not a party to the ISTC/BSC dispute.

It is a matter of public record that on December 20 1979, when industrial action against BSC seemed likely, Mr Sirs gave an undertaking to the Independent Steel Employers Association in open meeting that the private sector would not be involved. On January 17 1980, I received from Mr Sirs notice of an immediate

Portability of pensions

From Mr R. Jenkins

Sir.—Barry Riley (January 21) was right to point out that true pension portability would spell the end of final salary schemes, since the two approaches are irreconcilable.

The essence of a final salary scheme is the employer's guarantee to underwrite, regardless of cost, additional funding required to maintain a specified relationship between salary and pension. It is this guarantee that the employer relies for his pension, rather than the underlying funding.

Considerations of portability and injustice to early leavers have tended to focus on making the position of early leavers more comparable with that of those who stay. That is certainly the thrust of the Government's consultative document. Perhaps we should ask a more fundamental question—is it reasonable to allow employers to make the sort of guarantee implicit in a final salary scheme? As we all know, in calculating the cost of the guarantee—the employer takes account of the likely rate of early leavers. There is nothing wrong in that, but the point of concern is that early leavers are not confined to the "younger mobile elements" to whom Mr Riley refers. Often the real sufferer from lack of

portability is the middle-aged employee made redundant through no fault of his own. Final salary schemes were introduced with the best of intentions. Now we see that uncertainty over the term of employment introduces a random element into the benefit to the employee of the final salary guarantee, but often an employee will have no alternative but to accept. Indeed, at the time of acceptance of employment he may believe it is permanent.

The Government's proposals seek to remove the uncertainty by legislating to extend the guarantee (in a modified form) to early leavers. Since in the world of funded schemes nothing is for nothing, it is recognised that this will involve additional costs both to employers and fund members (possibly for the latter to be paid in the form of reduced benefits).

Effectively, this will be approaching a money purchase scheme with sufficient funding to provide for an assumed future rate of inflation, but with all the fearsome administrative complexity outlined by Eric Short.

Better surely, to remove the final salary guarantee and revert to true money-purchase.

Mr Jenkins, 3 Oaks Park, Rough Common, Canterbury.

Return of surplus

From Mr D. M. Anthony

Sir.—May I join the debate following the change of tack by the Superannuation Funds Office on the return of surplus?

It seems to me that what needs to be examined more closely is what is a "surplus position". Traditionally, pension funds in the UK have measured their strength of funding in terms of liabilities based on pensionable service and pensionable salary at the date of the valuation by the actuary. To the extent that assets exceed liabilities on that date, some people have drawn the conclusion that any excess constitutes a "surplus" position. Not so in my view, since in fact all that has taken place is a snapshot of the scheme's funding on a basis which assumes the scheme has been discontinued.

But pension schemes are, for the most part, on-going concerns and should be regarded as such. A view, endorsed in 1982 by the Accounting Standards Committee. Arguably, therefore, the proper view to take of funding, and therefore whether surpluses exist or not, is the relationship between assets and liabilities expressed in terms of pensionable service

to date and pensionable salaries projected to normal retirement—the real liability for a pension scheme providing benefits related to final pay. The assessment of funding produces, surely, a more meaningful and realistic view. It may be that "surplus" exists if assets exceed liabilities in these circumstances, although there are still questions to be raised and answered about funding objectives.

At present it is unlikely that many pension schemes enjoy "surplus" using this basis of examination. If the yardstick for determining such is the "on-going" approach, then the idea of a return of surplus may be more illusory than real.

One ingredient in the pursuit of "surplus" is superior investment performance and the selection of an investment manager in tune with the objectives which scheme trustees have; that, however, is another matter.

Of course the concept of return of surplus could always be part of the lobby for portable pensions.

M. R. Cornwall-Jones, Montagu Investment Management, 11, Devonshire Square, EC2.

Preference shares

From the Deputy Chairman, of John Gossit.

Sir.—May I take up a point raised in the Lex column (January 24) concerning preference shares. Lex points out that Grand Metropolitan has steeper for its offer, through its wholly-owned subsidiary Grand Metropolitan Investments, of 99.8 per cent of the preference shares of Grand Metropolitan (Scotland) and concludes that only another 0.2 per cent is needed before the compulsory purchase provisions of Section 209 may be applied. What Lex does not mention is that Grand Metropolitan already owns through its subsidiary over 50 per cent of this preference share issue. If this holding were to be treated as owned by the company bidding, Grand Metropolitan would need to secure acceptance in practice of 95 per cent of the total issue before applying for compulsory purchase powers.

Coping with the shock of the new in architecture

From Mr M. Manser.

Sir.—Of the many people who wrote to you about my article "Conservation has gone far too far" on January 11, none questioned the proposition. Most, however, attributed the problem to a general dislike of the new architecture.

There are probably four reasons for this. First, I do not deny that as in every other field of endeavour, architects are a varied bunch. Like lawyers, accountants and human beings generally, those who excel are in a minority.

Second, bearing in mind that nothing an architect designs is built unless someone likes it enough to pay the bill, some part of the responsibility for quite architectural revulsion lies with the public. An architect should be chosen by interview and examination of his previous work—a process just not available in the selection of other consultants, like lawyers or accountants. But it seldom happens that way.

There are three prime movers in the construction of the building. The owner, the architect

and the contractor. If it is to be well designed the owner and the architect have to work in close harmony and if it is to be well constructed the architect and the builder have to work in close harmony. The owner never fails to contribute. The architect, however, with a fine sense of architecture without a deeply interested and committed owner.

The third reason is what has been called the "Shock of the New." Seldom in history has contemporary architecture been much admired. Carlton House Terrace was deeply disliked; so was much of the work of Soane and the brothers Adam. In several books, John Austen refers pejoratively to "people who live in plain white modern houses." Recognition comes later.

Buildings which were regarded as monstrous modernistic buildings of the thirties—Odeon Style—are now much admired. In the fullness of time, so will much of our post-war building. That a building is unfamiliar and new may not mean it is bad.

The final reason is that we

have the most detailed planning control of architectural design in the world. Everything built in the last 45 years has been through the aesthetic sieve. The results are duller than those of the previous 45 years. It has been an expensive and worthless cause of delay in the development process. It can also sometimes become deeply undemocratic in its administration because decisions on the appearance of buildings are not taken by the owner or his chosen architect but by local authority environmental design officers. Human nature being what it is, they work on a subjective basis of what they like; with the prefer, indifference or hostility for feasibility, cost or delay. Their preferences are achieved by a kind of benign blackmail—because non-compliance means an expensive appeal to the Secretary of State which building owners can seldom afford in time or money.

Architects do not usually complain or object because they have to negotiate with the same environmental design officers the next time around.

UK Breakfast Television

The new gospel at TV-am

By Raymond Snoddy



Before the knives came out: TV-am stars at the launch a year ago. Of the original team only David Frost (third from left) is currently a regular presenter.

with a peak audience of 1.4m equaling the BBC peak. Timothy Aitken, chief executive of TV-am, three blunt predictions about the future of Britain's breakfast television company.

"You will have to make a write-off—sooner or later you will have to put the past behind you. You will have to go your self to the advertisers (by passing the agencies) and don't think you can do it in less than 18 months."

The 38-year-old Mr Aitken consulted the former chairman of Granada, who celebrated his 85th birthday yesterday, just after taking over Europe's only national commercial breakfast TV company last April.

"I knew a great deal about the communications business—certainly knew something about costs in Fleet Street," says the grandson of Lord Beaverbrook. "But I learned nothing about television."

Nine months and many crises and deadlines later as TV-am prepares to celebrate its first anniversary on the air tomorrow Lord Bernstein's warnings have turned out to be "the gospel."

First, the write-off. In November TV-am wrote off £4.5m in losses as part of a £5.5m re-financing that brought in Fleet Holdings and Kerry Packer's Consolidated Press with much needed new operating capital to join original shareholders such as Barclays Merchant Bank and Prudential Assurance.

Second, advertising. Last Monday, frustration with major advertising agencies and the continuing Institute of Practitioners in Advertising-Equity dispute, spurred Mr Aitken and editor-in-chief Greg Dyke, to begin a personal campaign to sell TV-am as an advertising medium directly to top companies.

"If they predicted a year ago when for a few weeks they were able to charge £7,500 a minute for advertising."

"We promised ratings which we have now delivered. But we are still around the £3,000 mark. That's pathetic. Somewhere along the line there is a breakdown," says Mr Aitken.

TV-am is now offering major companies the chance to pay an undisclosed premium on a £3,000 rate but to have it held for two years no matter how much the audience increases.

But the agencies are still sceptical. Mr Morgan Johnson, managing director of Davidson, Pearce, the advertising agency which placed the first advertisement shown on TV-am—for Wall's sausages—is still critical of the profile of the TV-am audience and its pro-rata costs compared with the rest of ITV.

"If they could deliver an average of 500,000-600,000 households throughout the year, that would be a very interesting medium," says Mr Johnson who, however, continues to do it. He believes that at the moment the average across the whole programme is less than 200,000.

The campaign is a sign of TV-am's urgent need for better revenues and its belief that most advertising agencies have not responded to TV-am improved ratings.

Mr Aitken argues that they have now produced the audience

they will need to get into the gloom until September."

TV-am is pinning its hopes for a larger audience on the summer Olympics in Los Angeles, with its stream of events taking place overnight. The company hopes that some at least of the new audience will stick, having sampled breakfast television for the first time.

"I think we will then go into the autumn with pretty sharp ratings figures and by that time the advertisers will be catching up with us," says Mr Aitken.

The latest audience figures available for the week ending January 22 show TV-am

is unlikely to be much above

2.5m. Costs running at a rate of £21m a year have been brought down to an annual rate below £15m but TV-am is still losing at least £200,000 a month.

Days before the anniversary celebrations Mr Aitken says there will be more orange juice than champagne—he planned to tighten the screw again to get costs down to £13m a year.

"There will be more dramatic cuts. I make no bones about it," he says.

Last week the management said it was looking for 50 redundancies from its 350 staff.

Mr Aitken, who has already handed over detailed day-to-day running of the company to Aitken Hume's U.S. investments, is reconciled to an "unspectacular first half at TV-am."

"I don't see it emerging from the gloom until September."

TV-am is pinning its hopes for a larger audience on the summer Olympics in Los Angeles, with its stream of events taking place overnight. The company hopes that some at least of the new audience will stick, having sampled breakfast television for the first time.

"I think we will then go into the autumn with pretty sharp ratings figures and by that time the advertisers will be catching up with us," says Mr Aitken.

The latest audience figures available for the week ending January 22 show TV-am

is unlikely to be much above

2.5m. Costs running at a rate of £21m a year have been brought down to an annual rate below £15m but TV-am is still losing at least £200,000 a month.

Days before the anniversary celebrations Mr Aitken says there will be more orange juice than champagne—he planned to tighten the screw again to get costs down to £13m a year.

"There will be more dramatic cuts. I make no bones about it," he says.

Last week the management said it was looking for 50 redundancies from its 350 staff.

Mr Aitken, who has already handed over detailed day-to-day running of the company to Aitken Hume's U.S. investments, is reconciled to an "unspectacular first half at TV-am."

"I don't see it emerging from the gloom until September."

TV-am is pinning its hopes for a larger audience on the summer Olympics in Los Angeles, with its stream of events taking place overnight. The company hopes that some at least of the new audience will stick, having sampled breakfast television for the first time.

"I think we will then go into the autumn with pretty sharp ratings figures and by that time the advertisers will be catching up with us," says Mr Aitken.

The latest audience figures available for the week ending January 22 show TV-am

is unlikely to be much above

2.5m. Costs running at a rate of £21m a year have been brought down to an annual rate below £15m but TV-am is still losing at least £200,000 a month.

Days before the anniversary celebrations Mr Aitken says there will be more orange juice than champagne—he planned to tighten the screw again to get costs down to £13m a year.

"There will be more dramatic cuts. I make no bones about it," he says.

Last week the management said it was looking for 50 redundancies from its 350 staff.

Mr Aitken, who has already handed over detailed day-to-day running of the company to Aitken Hume's U.S. investments, is reconciled to an "unspectacular first half at TV-am."

"I don't see it emerging from the gloom until September."

TV-am is pinning its hopes for a larger audience on the summer Olympics in Los Angeles, with its stream of events taking place overnight. The company hopes that some at least of the new audience will stick, having sampled breakfast television for the first time.

"I think we will then go into the autumn with pretty sharp ratings figures and by that time the advertisers will be catching up with us," says Mr Aitken.

The latest audience figures available for the week ending January 22 show TV-am

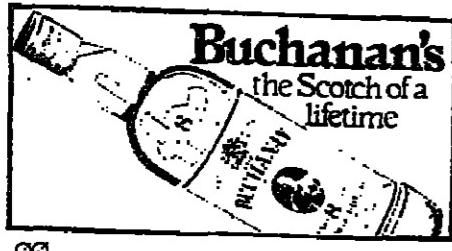
is unlikely to be much above

2.5m. Costs running at a rate of £21m a year have been brought down to an annual rate below £15m but TV-am is still losing at least £200,000 a month.

Days before the anniversary celebrations Mr Aitken says there will be more orange juice than champagne—he planned to tighten the screw again to get costs down to £13m a year.

"There will be more dramatic cuts. I make no bones about it," he says.

Last week the management said it was looking for 50 redundancies from its



FINANCIAL TIMES

Tuesday January 31 1984



John Wyles in Brussels examines a conspiracy theory

Surprise milk bill confuses UK rebate row

AT LEAST two obstacles obstruct early payment of a \$600m rebate on Britain's 1983 EEC budget contributions, but the weekend's "storm in a milk churn" over the allegedly illegal administration of the UK dairy industry is not one of them.

Sig Fasinc, the European Commission's financial controller, was according to his colleagues, bloodied but unbowed yesterday after leakage of his recommendation that Britain should be forced to repay Ecu 755.6m (\$605.4m) of EEC money, which he alleges, improperly supported UK dairy production in 1978 and 1979.

With Mrs Margaret Thatcher, the British Prime Minister, still struggling to prise out of the Community an Ecu 750m rebate agreed at the Stuttgart summit last June, the similarity of the amounts inflamed some suspicions that somebody somewhere was determined to make sure that the rebate was never paid.

No such doubts can be attached to the Commission, which points out that it is the European Parliament that is blocking payment of the rebate until at least March 31. If it is not paid by then, everyone ex-

pects Mrs Thatcher to deduct the money from Britain's monthly contributions to the EEC. In any case, all member states have to agree the necessary regulations before the parliament can decide, and they have not yet done so.

As Sig Fasinc's views on the need to reclaim the dim and distant milk payments, they are disputed both by the Commission's legal services and its agricultural directorate. The Commission itself will take a stand either tomorrow or next Wednesday and as Mr Ivor Richard, the Commissioner for Social Affairs, has already publicly predicted, it will be the same as Sig Fasinc's.

As financial controller, Sig Fasinc has an independent responsibility for ensuring that all payments conform with EEC regulations. Since the Commission is somewhat behind on its work of certifying and "clearing" the administration of past budgets, 1978 and 1979 have only been completed.

Having concluded that the UK Milk Marketing Board's pricing policies were in breach of regulations in those years, he has had no option

but to urge recovery of all payments made to the UK's dairy sector in those two years.

He has made similar "take-back" recommendations affecting other member states in past years and has subsequently been overruled by the Commission. He will not be surprised to suffer the same fate this time.

One official said yesterday that history was littered with cases of governments pocketing the market for Irish dairy products in Britain. The board is taking legal action against the UK on the issue.

Nevertheless, the Commission has concluded that the Milk Marketing Board's policies of selling liquid milk to dairies at a lower price if the milk is destined for butter production are in breach of regulations adopted in 1978.

Although the UK body agreed to mend its ways at the end of last year, it has not done so, and the Commission started a case against Britain at the European Court last week.

The effect has been to encourage disposal of British butter on the British market rather than in sales for storage. That has helped the



Mr Ivor Richard

British Government's cash flow, since the Treasury has to finance intervention purchases, which are only subsequently reimbursed by the EEC.

Brendan Keenan adds from Dublin: The Irish Dairy Board has accused Mr Richard of "jingoistic partiality" because of his comments on the dispute over British milk subsidies. In a message to the Commission President, M Gaston Thorn,

the Irish board said Mr Richards had prejudged the issue.

The Irish claim that the UK milk regulations are costing them millions of pounds each year and have virtually destroyed the market for Irish dairy products in Britain. The board is taking legal action against the UK on the issue.

Richard Mooney writes from London: The British Ministry of Agriculture and Milk Marketing Board were continuing to keep low profiles on the issue yesterday.

"The possibility of increasing the expenditure doesn't arise," said a ministry official. Only part of the total contravened EEC rules, but the Brussels accountants seemed to be implying that the rest was "guilty by association". He would not estimate what proportion of the total 1978-79 payment was illegal.

The board denied that its two-tier pricing policy for bulk and packet butter amounted to cross-subsidisation. The price differential reflected the greater costs involved in producing packet butter, a board spokesman said.

THE LEX COLUMN

A ritual rally in Hong Kong

Following an oriental tradition which some believe to date back as far as 1983, the Hong Kong stock market has been moving up sharply ahead of the Chinese New Year. Yesterday's 4.2% point rise takes the Hang Seng index to a six-month peak of 1097.63 and if it can manage another 6 points it will be at a level last seen in September 1982, when Mrs Thatcher's visit to Peking officially inaugurated the 1987 bear market.

The immediate cause of yesterday's surge was the 1-point cut in local best lending rate at the weekend. Prime is now 11 1/4 per cent, down from 16 per cent four months ago, and linking the Hong Kong dollar to the US dollar has been an unflawed success - to the extent that some of the money now coming into equities is coming from the dollar currency hedges established during last year's panic.

The high volume of Hong Kong trading is feeding hopes that the market can keep going. Yesterday's turnover of HK\$500m was the equivalent of an entire week in the troughs of 1982-83.

The surge is partly based on the economy, with manufacturing turning in a record export performance and even the property sector showing signs of recovery. But the rally owes most of its vigour to the belief that Britain and China will resolve the 1987 uncertainty sooner rather than later. Betting now favours a statement in May or June, paving the way to Chinese sovereignty. The punters do not much mind if it is going to work, but it will be poor tribute to the public relations of London and Peking if the stock market is not given something to chew on.

HARRISONS

The rolling process of Malaysiaisation appears once again to be working for the benefit of shareholders in Harrisons & Crosfield. At a moment when commodity prices have been moving strongly in the planters' favour - palm oil you takes your choice.

CGT calls for protest on Paris policies

By David How in Paris

FRANCE'S CGT has issued its strongest condemnation so far of government's proposals for restructuring ailing sectors of French industry and called for "mass trades union action to get them changed."

Henri Krasnicki, the CGT leader, said in a broadcast statement that "unbelievable attacks" were being made on workers' rights and "exorbitant privileges" granted to employers.

His comments covered the Government's plans for creating new "industrial reconversion zones" where unions fear that existing labour and social legislation will be relaxed to encourage new investment.

He accused the "employers" of trying to turn the clock back decades in terms of social policy and of pursuing goals that would accelerate industrial decline while increasing unemployment. In current Communist Party jargon, the term "employer" has become a synonym for the Government.

M Krasnicki said his union would not accept today what it had rejected in the past from previous administrations and employers' organisations. The time had come, he said, "to sound the alarm... and for mass trade union action, well timed and led."

M Krasnicki clearly intended that his remarks should influence the forthcoming round of ministerial meetings to discuss the future of the steel and coal sectors.

They were also timed to have an impact on yesterday's ministerial meeting called to discuss the proposed "reconversions" or "free zones."

The Government, reacting to trade union hostility to press laws, indicated yesterday that there would be no going back on past social legislation in the new zones.

The Government's intention is that the zones should be established in areas such as Lorraine, the Vosges, Ardennes, Monluçon, Dunkerque and the Nord-Pas de Calais, which are suffering the worst redundancies.

Small and medium-sized companies would be encouraged to set up new activities through fresh financial incentives. The Government, which sees measures as part of a new offensive to create more jobs, intends that the zones should be co-operative ventures between employers, the regional authorities and the unions.

Other ideas, such as the two-year retraining programmes proposed for the redundant by M Pierre Mauroy, the Prime Minister, would also be tried in the zones.

EEC asks Japan to suspend duties on manufactured imports

By JUREK MARTIN IN TOKYO

THE EEC has proposed that Japan "suspend" import duties on manufactured goods for an indefinite period to reduce its growing trade surplus with the Community.

The suggestion was in a letter sent by Herr Wilhelm Haferkamp, the EEC vice-president, to Mr Hiroshiro Okuno, the Minister of International Trade and Industry.

It is expected to form a basis for talks in Florida this week when the trade ministers of Japan, the EEC, the U.S. and Canada meet in their next round of regularly scheduled talks.

Herr Haferkamp's letter also suggests three other ways in which Japan could increase imports, all raised at previous meetings. They are that:

● Japan advance by a full three years, and not, as currently planned, by one or two years, scheduled tariff cuts agreed in the Tokyo Round trade negotiations concluded in 1979. Japan is phasing in tariff cuts on a yearly basis up to January 1 1987, when the cuts will be complete.

A feeling seems to exist among Community officials that Japan's constant trade negotiations with the U.S. are relegating the Community to even more of a back seat than it customarily occupies.

The Community wants to change that perception before the Florida meeting, which will feature bilateral and quadrilateral discussions.

Trafalgar House may take over shipyard

By IAN HARGREAVES AND PETER RIDDELL IN LONDON

TRAFAJALGAR HOUSE, the building, property and shipping group, which they see as saving 4,250 jobs in a politically sensitive part of Scotland. The intervention would also, it is argued, preserve an important British facility in the offshore industry.

Mrs Margaret Thatcher, the Prime Minister, and Mr Norman Tebbit, the Secretary of State, have already agreed in principle that the term of the deal should be sweetened with funds from the regional aid budget.

Trafalgar confirmed that it had been approached by British Shipbuilders, Scott Lithgow's parent company, about a possible deal.

"We have investigated the possibility of our taking over the yard and completing the Bristol contract. We are currently engaged in talks," the company said.

Although no further details were available, British Shipbuilders and Trafalgar House should be ready to put forward a firm, joint proposal to Government within 10 days.

The terms envisage a free transfer of the yard's assets, which BS considers to have little more than scrap value. It is possible that the deal will take the form of a lease rather than an outright sale.

Although ministers said in a debate on Scott Lithgow in Parliament last week they would not intervene financially, they have changed their minds in the light of the election.

The deal would fit in with Trafalgar's aggressive expansion of its steel fabrication interests and its North Sea oil activities.

Telecom pact agreed by Japan, U.S.

Continued from Page 1

more advanced equipment and also because of the spin-offs they see, from R and D involvement in a company which is one of the most advanced in the world in this field.

The agreement appears to have fallen short of U.S. hopes since the Japanese have not agreed to remove the prohibition on the sale of U.S. satellites to Japan, which wants to develop its own.

Further talks to try and tackle other trade issues are planned, including a visit to Washington shortly by Mr Shinjiro Yamamura, the Japanese Agriculture Minister, which is expected to focus on long-standing U.S. complaints about the quotas Japan imposes on U.S. beef and citrus exports.

During Mr Abe's visit which has included sessions with President Ronald Reagan, Mr George Shultz, the Secretary of State, and Mr Caspar Weinberger, the Defence Secretary, Japanese officials have been emphasising their Government's desire to make progress on trade issues at a time when the forthcoming presidential election is contributing to growing calls from several industries for greater protection in the U.S. The U.S. is also concerned that the relationship with Japan should not become a "political football" in the run up to the election.

Armclo insurance sale

Continued from Page 1

stemmed from a strategic decision to "remove Armclo from the insurance business." This decision resulted from changes in Armclo's tax status in the wake of massive write-offs on its steelmaking and manufacturing facilities which Mr Holiday said meant that Armclo "is no longer able to offset underwriting losses with tax credits."

As a result of Armclo's decision to sell the insurance business, Mr Holiday also announced that Mr H. T. (Ted) Cohn, group vice-president and chief executive of Armclo financial services group, and Mr William Smengo-Turner, president of the group's London-based financial services operations, had resigned.

"Since our company's strategic plan no longer coincides with their objective, these gentlemen have decided to pursue other personal interests," Mr Holiday said. "Mr Cohn will join the management and actuarial consulting firm of Tillinghast, Nelson and Warren with emphasis on acquisitions and mergers."

The announcement that Armclo planned to sell its insurance business was widely welcomed by Wall Street analysts yesterday, although they pointed out that valuing the deal was particularly difficult.

Cheysson to visit Libya for Chad talks

By David Marsh in Paris

FRANCE last night launched a diplomatic offensive to secure peace in Chad with the announcement that M Claude Cheysson, the Foreign Minister, will hold talks in Libya at the end of this month.

Japan is holding out the hope that, as domestic demand continues to grow, imports should expand faster than exports - by 8 per cent, against 6.8 per cent, according to the budget estimates.

A feeling seems to exist among Community officials that Japan's constant trade negotiations with the U.S. are relegating the Community to even more of a back seat than it customarily occupies.

French troops and airbase forces were yesterday patrolling the new buffer zone, which divides the country between the relatively populous Government-held south and the rebel-occupied desert regions of the north.

But the Ministry of Defence made clear that the main "front line" of French troops - who have been in Chad since last August to support the N'Djamena Government - remained the previous demarcation strip linking the townships of Salai and Arada.

M Cheysson's African trip is being labelled by the Paris Government as an extension of diplomatic efforts started last summer to bring a pan-African peace solution to Chad. The Addis Ababa Government currently holds the presidency of the Organisation of African Unity.

Belgrade plans fallback if IMF talks fail

By Aleksandr Lebl in Belgrade and Anthony Robinson in London

AS YUGOSLAVIA prepares for next week's third and probably final round of negotiations with the International Monetary Fund (IMF) for a new standby credit, Mr Zvone Dragan, the Deputy Prime Minister, has admitted the existence of a fallback plan to be imposed if the IMF talks fail.

Speaking on Radio Belgrade, Mr Dragan said that so-called "black variant" would involve a sharp drop in production income and consumption, attempts to switch trade away from developed industrial countries, and other stringent economy measures.

The next round of IMF talks is expected to start in Belgrade on February 8. The two sides will attempt to reconcile IMF proposals for higher interest rates, depreciation of the dinar, and changes to foreign exchange and credit policies, with Yugoslavia fears about the political consequences.

Mr Dragan, who will meet Mr Jacques de Larosiere, IMF managing director, in Washington today, is also paving the way for the visit of Mr Milka Spiljak, the Yugoslav president.

Mr Spiljak arrives in Washington today on the first state visit since the late Marshal Tito's visit six years ago.

He will be accompanied by Mr Lazar Mojsov, the foreign minister,

and will meet President Ronald Reagan and other top officials.

Spending an hour walking round Oriel House, Connaught Place, London W2, a magnificent new air conditioned office building providing 84,000 sq.ft. could be the best investment you can make with your time this year.

For more information on this magnificent headquarters building contact WILLIAM BOYLE.

Chestertons

Chartered Surveyors

01-499 0404

75 Grosvenor Street, London W1X 0JB

Published by The Financial Times (Europe) Ltd, Frankfurt Branch, represented by G.T.S. Damer, Frankfurt/Main, N. Böhrer, R.A.F. McClellan, M.C. Gorman, D.E.P. Palmer, London, as members of the Board of Directors, Printer: Frankfurter Sonderdruckerei GmbH, Frankfurt/Main. Responsible editor: C.E.P. Smith, Frankfurt/Main. © The Financial Times Ltd, 1984.

Weather		Wind	
F 12	E	F 12	N
Arcos	S 17	F 13	S 17
Almeria	S 17	F 13	S 17
Agosto	S 17	F 13	S 17
Almeria	S 17	F 13	S 17
Almeria	S 17	F 13	S 17
Almeria	S 17	F 13	S 17
Almeria	S 17		

Tuesday January 31 1984



Boeing halts downturn with \$355m for year

BY WILLIAM HALL IN NEW YORK

BOEING, the giant U.S. aerospace group, pulled out of its two-year profit decline in 1983 and has posted a 21.5 per cent rise in 1983 net income to \$355m.

Mr T. A. Wilson, Boeing's chairman, says that the increase in earnings was attributable to increased sales, a lower level of research, development and engineering expenses on new jet transports, and continued favourable performance on U.S. government projects. The principal offsetting factors were the "extremely competitive market environment" and a higher effective tax rate.

Net income in the fourth quarter totalled \$96m, against \$91m a year before. For the full year, Boeing earned \$3.87 per share against \$3.02.

Boeing sales for the full year rose 23 per cent to \$11.1bn.

Texaco to sell Getty Oil outlets

By Our New York Staff

TEXACO, the U.S. oil group, plans to dispose of nearly half of Getty Oil's 4,490 service stations in an effort to clear one of the main anti-trust hurdles in its \$10.1bn takeover of Getty.

Texaco said on Sunday that it had agreed to transfer substantially all of Getty Oil's marketing activities in the north-eastern and middle Atlantic regions of the U.S. to Power Test Corporation, a small independent petroleum marketing company.

The sale covers 600 of the 970 stations owned or leased by Getty in the region. In addition, Power Test has agreed to assume contractual obligations to supply another 1,300 additional Getty franchised stations. For the year ended December 31, 1983, the Getty operation to be transferred to Power Test had revenues of \$1.4bn.

The cost of the deal is around \$70m and will be consummated only when Texaco has received clearance to take over Getty Oil.

Texaco has agreed to assist in supplying Power Test's petroleum product requirements for the acquired properties by selling up to 22m barrels a year of petrol and 11m barrels a year of middle distillate petroleum products for a three-year period after the sale.

Phillips Petroleum, the Oklahoma-based integrated oil and gas company, boosted fourth-quarter net profits from \$155m to \$1.01 a share to \$247m or \$1.61. However, the 1983 figures include a non-recurring gain of \$58m, against a \$53m loss in 1982, leaving the underlying performance virtually unchanged.

For the year, Phillips lifted net earnings from \$648m or \$4.23 a share to \$721m or \$4.71. Revenues slipped from \$15.9bn to \$15.3bn, with \$4.15bn (\$4.08bn) coming in the latest quarter.

Standard Oil Company (Indiana), the Illinois-based integrated oil company, plans to cut its workforce by about 3,000 or 5 per cent this year. The cuts would come through natural wastage and early retirement.

The company said the cuts were part of a company-wide cost reduction drive.

REFINING AND DISTRIBUTION LOSSES HALVED

Elf stays at top of French profits league

BY DAVID MARSH IN PARIS

ELF AQUITAINE, the French state-controlled oil and chemicals group, yesterday said net consolidated profits last year were similar to the FF 1.35bn (£406m) registered for 1982, maintaining the company's position as the most profitable in France.

M. Michel Pecqueur, Elf's new chairman, who took over from M. Alain Chalandon last June, said the results marked a clear increase in Elf's profitability, as the 1982 surplus was boosted by exceptional receipts of FF 1.6bn in repayment of debts from Iran.

Last year's profit was registered on group turnover of FF 135bn, up sharply from FF 115bn in 1982. The rise resulted mainly from the incorporation in mid-year of large slices of chemical operations formerly belonging to France's nationalised Pechiney group. Those were transferred under the Government's chemical industry reorganisation.

M. Pecqueur announced last year's "positive" results after weeks of controversy over the group's role in France's "oil sniffing" affair. During the late 1970s Elf transferred abroad FF 500m to finance oil prospecting using an electronic method drawn up by foreign "inventors" which later turned out to be

based on a fraud.

The new chairman, who took over after M. Chalandon was dismissed by the Government in a row over the chemical industry restructuring, declared that the progress of the group should be judged on the basis of its overall financial results and exploration activities, rather than on a "limited" event which, "although painful, belongs in the past."

He made clear that last year's underlying profits improvement was due chiefly to a fall of roughly half in losses incurred by its refining and distribution business.

Showing the financial improvement, cash flow last year (including base chemicals, but after deducting exploration charges) rose to FF 14bn from FF 11.3bn in 1982.

Investments were maintained at around FF 15bn, M. Pecqueur cited as an example of continuing international expansion in the group in spite of the "sniffing" affair - the results of the latest round of Norwegian North Sea oil block allocations.

Announced last Friday they gave Elf an 8 per cent exploration share in the "Diamond" offshore block. The only other non-Norwegian companies given allocations were Esso and West Germany's Deminex.

The "economic loss" in the refining and distribution area, based on

Continued operations rise 24% at Time

By Paul Taylor in New York

TIME, the U.S. publishing, information and entertainment group which recently spun off its lowest products division, Temple-land, as a separate company, yesterday reported a 24 per cent increase in net earnings from continuing operations in the fourth quarter.

Time's fourth quarter net earnings from continuing operations increased to \$44.53m or 70 cents a share from \$35.38m or 57 cents a share in the 1982 final quarter.

The 1983 quarter results are before \$14.1m in net earnings from the divested forest products division and a net loss of \$4.3m from discontinued operations.

After these items Time's final net earnings for the 1983 quarter were \$54.93m or 86 cents a share compared to a final net of \$43.2m or 68 cents a share in the 1982 period.

This included net earnings of \$18.82m from Temple-land and a \$8.49m net loss from discontinued operations. Revenues increased to \$763.1m from \$668.9m.

For the full year Time reported net income from continuing operations of \$143.2m or \$2.25 a share compared with \$122.88m or \$1.97 a share in 1982.

After net income of \$51.7m from divested operations and a loss of \$26m from discontinued operations, Time reported a final net of \$163.9m or \$2.65 a share in 1982 after net income of \$35m and a \$22.8m loss from discontinued operations. Revenues increased from \$2.372bn, to \$2.72m.

Time said the results of Temple-land, which was divested as a separate company from January 1, have been reclassified for reporting purposes as a discontinued operation as of December 31, 1983. Discontinued operations also include losses incurred in connection with Time's subscription television business, which was closed down last year, and an adjustment to the provision for the shutdown of Time-Life Films, which was closed down in 1981.

Revised result for Kaiser Aluminum

By Our Financial Staff

A TURNROUND of more than \$70m in the fourth quarter enabled Owens-Illinois, the largest U.S. glass container maker, to recoup some lost ground and finish 1983 with net earnings of \$89.1m, or \$2.48 a share. This compares with \$90.7m or \$3.18 for the previous year, when there was a \$5.1m gain from an accounting change.

In the last three months of 1983 there was a recovery to a net profit of \$88.7m, or \$1.39, against a \$3.6m loss in the third quarter and a \$31.5m loss a year earlier. Sales for the quarter fell to \$814.8m from

\$887.7m, leaving the year's total down at \$3.22bn from \$3.55bn.

The company expects to show substantially increased earnings in 1984 on the back of a strong recovery in the U.S. economy and the strengthening of its basic markets.

Earnings before rationalisation adjustments and disposals in the fourth quarter were up from \$3.5m to \$19.0m.

The loss in the third quarter arose from \$23m provisions caused by the extensive reorganisation of the group's international operations.

American Brands ahead

By Our New York Staff

AMERICAN Brands, the fourth largest U.S. tobacco company, and the owner of Gallaher in the UK, reported record net profits of \$390m last year, despite a much higher tax charge and the unfavourable effects of the slide in the pound.

Earnings were up by 24 per cent from \$331m, or \$6.55 a share, to \$390m, or \$8.76 a share, while sales rose by 8 per cent from \$6.5bn to \$7.1bn. The tax charge, however, was up by a little over 18 per cent to \$340m and the company added that

if the exchange rate for sterling had remained constant, net income would have been up by 6 per cent, the equivalent of an additional \$14m, or 26 cents a share.

In the fourth quarter, earnings rose to \$104m, or \$1.81 per share, against \$103.8m, or \$1.80 a share in 1982, despite a 20 per cent increase in the tax charge.

Mr Edward Whittemore, chairman, said that Gallaher, which makes Benson and Hedges and Silk Cut brands, had a "superb year."

Refining and distribution losses halved

By Our New York Staff

AMERICAN Brands, the fourth largest U.S. tobacco company, and the owner of Gallaher in the UK, reported record net profits of \$390m last year, despite a much higher tax charge and the unfavourable effects of the slide in the pound.

Earnings were up by 24 per cent from \$331m, or \$6.55 a share, to \$390m, or \$8.76 a share, while sales rose by 8 per cent from \$6.5bn to \$7.1bn. The tax charge, however, was up by a little over 18 per cent to \$340m and the company added that

if the exchange rate for sterling had remained constant, net income would have been up by 6 per cent, the equivalent of an additional \$14m, or 26 cents a share.

In the fourth quarter, earnings rose to \$104m, or \$1.81 per share, against \$103.8m, or \$1.80 a share in 1982, despite a 20 per cent increase in the tax charge.

Mr Edward Whittemore, chairman, said that Gallaher, which makes Benson and Hedges and Silk Cut brands, had a "superb year."

Elf stays at top of French profits league

By Our New York Staff

ELF AQUITAINE, the French state-controlled oil and chemicals group, yesterday said net consolidated profits last year were similar to the FF 1.35bn (£406m) registered for 1982, maintaining the company's position as the most profitable in France.

M. Michel Pecqueur, Elf's new chairman, who took over from M. Alain Chalandon last June, said the results marked a clear increase in Elf's profitability, as the 1982 surplus was boosted by exceptional receipts of FF 1.6bn in repayment of debts from Iran.

Last year's profit was registered on group turnover of FF 135bn, up sharply from FF 115bn in 1982. The rise resulted mainly from the incorporation in mid-year of large slices of chemical operations formerly belonging to France's nationalised Pechiney group. Those were transferred under the Government's chemical industry reorganisation.

M. Pecqueur announced last year's "positive" results after weeks of controversy over the group's role in France's "oil sniffing" affair. During the late 1970s Elf transferred abroad FF 500m to finance oil prospecting using an electronic method drawn up by foreign "inventors" which later turned out to be

NEW 740 GLE MODEL CLOSES IMPORTANT GAP

Volvo takes on competitors

BY KEVIN DONE, NORDIC CORRESPONDENT, IN GOTHEBORG

VOLVO, the leading automobile producer in northern Europe, yesterday launched itself into a new segment of the world high performance car market, further intensifying the competition with the chief rivals BMW, Daimler-Benz and Audi of West Germany.

It is aiming to take a growing share of the world market for sporty, high performance saloons, which it estimates at around 1.1m units this year. The new 740 GLE model closes an important gap in the fourth quarter.

The Swedish industrial concern, the largest in the Nordic region, is enjoying a dramatic surge in the fortunes of its car operations, which are now generating the lion's share of group profits, and are carrying the heavily loss-making energy operations.

The 1983 quarter results are before \$14.1m in net earnings from the divested forest products division and a net loss of \$4.3m from discontinued operations. After these items Time's final net earnings for the 1983 quarter were \$54.93m or 86 cents a share compared to a final net of \$43.2m or 68 cents a share in the 1982 period. This included net earnings of \$18.82m from Temple-land and a \$8.49m net loss from discontinued operations. Revenues increased to \$763.1m from \$668.9m.

For the full year Time reported net income from continuing operations of \$143.2m or \$2.25 a share compared with \$122.88m or \$1.97 a share in 1982.

After net income of \$51.7m from divested operations and a loss of \$26m from discontinued operations, Time reported a final net of \$163.9m or \$2.65 a share in 1982 after net income of \$35m and a \$22.8m loss from discontinued operations. Revenues increased from \$2.372bn, to \$2.72m.

The 1983 quarter results are before \$14.1m in net earnings from the divested forest products division and a net loss of \$4.3m from discontinued operations. After these items Time's final net earnings for the 1983 quarter were \$54.93m or 86 cents a share compared to a final net of \$43.2m or 68 cents a share in the 1982 period. This included net earnings of \$18.82m from Temple-land and a \$8.49m net loss from discontinued operations. Revenues increased to \$763.1m from \$668.9m.

For the full year Time reported net income from continuing operations of \$143.2m or \$2.25 a share compared with \$122.88m or \$1.97 a share in 1982.

After net income of \$51.7m from divested operations and a loss of \$26m from discontinued operations, Time reported a final net of \$163.9m or \$2.65 a share in 1982 after net income of \$35m and a \$22.8m loss from discontinued operations. Revenues increased from \$2.372bn, to \$2.72m.

The 1983 quarter results are before \$14.1m in net earnings from the divested forest products division and a net loss of \$4.3m from discontinued operations. After these items Time's final net earnings for the 1983 quarter were \$54.93m or 86 cents a share compared to a final net of \$43.2m or 68 cents a share in the 1982 period. This included net earnings of \$18.82m from Temple-land and a \$8.49m net loss from discontinued operations. Revenues increased to \$763.1m from \$668.9m.

For the full year Time reported net income from continuing operations of \$143.2m or \$2.25 a share compared with \$122.88m or \$1.97 a share in 1982.

After net income of \$51.7m from divested operations and a loss of \$26m from discontinued operations, Time reported a final net of \$163.9m or \$2.65 a share in 1982 after net income of \$35m and a \$22.8m loss from discontinued operations. Revenues increased from \$2.372bn, to \$2.72m.

The 1983 quarter results are before \$14.1m in net earnings from the divested forest products division and a net loss of \$4.3m from discontinued operations. After these items Time's final net earnings for the 1983 quarter were \$54.93m or 86 cents a share compared to a final net of \$43.2m or 68 cents a share in the 1982 period. This included net earnings of \$18.82m from Temple-land and a \$8.49m net loss from discontinued operations. Revenues increased to \$763.1m from \$668.9m.

For the full year Time reported net income from continuing operations of \$143.2m or \$2.25 a share compared with \$122.88m or \$1.97 a share in 1982.

After net income of \$51.7m from divested operations and a loss of \$26m from discontinued operations, Time reported a final net of \$163.9m or \$2.65 a share in 1982 after net income of \$35m and a \$22.8m loss from discontinued operations. Revenues increased from \$2.372bn, to \$2.72m.

The 1983 quarter results are before \$14.1m in net earnings from the divested forest products division and a net loss of \$4.3m from discontinued operations. After these items Time's final net earnings for the 1983 quarter were \$54.93m or 86 cents a share compared to a final net of \$43.2m or 68 cents a share in the 1982 period. This included net earnings of \$18.82m from Temple-land and a \$8.49m net loss from discontinued operations. Revenues increased to \$763.1m from \$668.9m.

For the full year Time reported net income from continuing operations of \$143.2m or \$2.25 a share compared with \$122.88m or \$1.97 a share in 1982.

After net income of \$51.7m from divested operations and a loss of \$26m from discontinued operations, Time reported a final net of \$163.9m or \$2.65 a share in 1982 after net income of \$35m and a \$22.8m loss from discontinued operations. Revenues increased from \$2.372bn, to \$2.72m.

</

INTERNATIONAL COMPANIES and FINANCE

INTERNATIONAL APPOINTMENTS

Worldwide head for Warner Home Video

WARNER HOME VIDEO, the Warner Communications company, has appointed Mr Warren Lieberfarb to lead its operations worldwide as executive vice-president and general manager. Before joining Warner, he was senior vice-president of Lorimar Productions, responsible for advertising and publicity as well as network and ancillary market sales.

He was appointed vice-president marketing of Warner Home Video in 1982, from which position he was promoted to vice-president and general manager of U.S. operations, the position he currently holds.

Oppenheimier, the U.S. investment company, has appointed Mr Francis H. M. Kelly as director of research, executive vice-president and a member of executive committee. Mr Kelly was a director, senior vice-president and chairman of the investment policy committee at Dean Witter Reynolds.

Mr Ronald J. Gidwitz, president and member of the board of directors of Helene Curtis Industries, has been appointed a public director of the Chicago Board of Trade. He has been appointed to a three-year term, beginning on February 1. He will serve as one of three non-member public directors called for by the rules and regulations of the Board of Trade.

Mr Harold J. Meyerman has been named executive vice-president and manager of First Interstate Bank's international division. Formerly senior vice-president and group head, Europe for Bankers Trust corporate department, based in London, Mr Meyerman has been responsible for multinational and other corporate business in Europe, including global insurance and shipping.

Dr Claus Braestrup has been appointed president in charge of Novo's pharmaceuticals research and development from March 19. Since 1976 he has collaborated and held a part-time appointment with the Danish pharmaceutical company, Fersosan. He has published an extensive range of scientific papers, including articles on receptors of the central nervous system and their sensitivity to drugs. Dr Braestrup will also join Novo's corporate research council.

Mr John M. Lindsey has been elected senior vice-president, legal and corporate affairs, of Pan American World Airways. He succeeds Mr Jerome E. Hyman, who served temporarily as senior vice-president

Strong first half for Malayan Banking

By Wong Sulong in Kuala Lumpur

MALAYAN BANKING, Malaysia's second largest banking group, has reported a strong performance for the half year to December, with after-tax profits rising by 34 per cent to 50.6m ringgit (US\$ 21.7m).

The bulk of the profits came from the parent bank, the earnings of which rose by 20 per cent to 37.5m ringgit, but percentage-wise, its subsidiaries, Kwong Yik Bank, Asambankers, Malayan Finance Corporation and Maybank-Phoenix Assurance, turned in bigger increases.

Group total deposits rose by a hefty 47 per cent to over 9bn ringgit, while loans and advances rose 37 per cent to 8bn ringgit.

Asambankers, the merchant bank, is now a 50.5 per cent owned subsidiary, rather than an associate, and its year end has been aligned to that of the group, giving rise to an additional profit of 1.35m ringgit.

During the period, Malayan Banking opened eight more branches, bringing its branch network to 151, while the Hong Kong representative office was upgraded into a full branch.

The interim dividend is unchanged at 8 cents, and the bank expects second-half earnings to be as good as those for the first.

• Cold Storage Holdings of the UK is to restructure its Malaysian operations in line with the Government's New Economic Policy by selling a majority stake to the Malays.

The deal comes in two parts. First, Cold Storage Malaysia (CSM), a subsidiary of Cold Storage Holdings (CSH), will buy Fima Supermarkets, which is 70 per cent held by CSH and 30 per cent by Fima, a Malaysian Government agency.

• Park Tower Realty has appointed Mrs Veronica W. Hackett as senior vice-president to direct the company's leasing and financing activities. She joined the New York-based property development company after nine years with Chemical Bank. Her most recent position with Chemical was senior vice-president real estate services division.

• Euro-clear operations centre in Brussels has promoted Mr Peter J. Crouch, Mr Martine Diane and Mr Jacques-Philippe Marsen to assistant vice-presidents.

Selwyn Parker on the financial services plans of an insurance major

Transformation at NZ South British

NEW ZEALAND South British, the biggest private general insurance company in Australasia, is planning to launch a new range of financial services similar to Merrill Lynch and Prudential-Bache.

The transformation of NZ South British, which still relies

on its general insurance division for 70 per cent of its revenue, into an aggressive, market-led financial services operation will start this year.

"We are probably the best-positioned of any company in New Zealand to provide these services," said Mr Reg Clough, the company's public affairs manager. NZ South British has assets of NZ\$1.4bn (US\$800m).

The company has already dipped its toe in these profitable waters by adding a variety of insurance packages to holders of its Diners Card, which is 81 per cent owned by NZ South British in New Zealand.

According to Mr David Chalmers, the chief executive, there will be a lot of cross-selling between divisions as the company evaluates consumers' needs.

(It also underwrites "for very considerable amounts" Westpac's house and contents insurance package in Australia.)

He told senior managers last year: "The most successful companies are those which analyse their markets and design their products accordingly - the message is segment, segment, segment."

The company's change of direction, just in time, says one senior executive follows a total and painful shake-up of objectives and of management following the merger with NZ Insurance in 1981. Mr Chalmers said the merger cost more

money and time than had been expected.

Out of the blend of two conservative insurance companies, both over a century old, has emerged a new corporate structure of more or less autonomous divisions. Each has a budget and a target return on shareholders' funds.

"Accountability has been built in," explains Mr Clough. "The aim was to drive management decisions downwards, to have decisions made as close as possible to the action."

After several poor years the general insurance division came under particularly tough scrutiny.

The entire underwriting portfolio was rationalised and bad risks thrown out. Though NZ South British is committed to rapid diversification, the general insurance division, which has NZ\$205m in shareholders' funds and annual revenues of NZ\$467m, still forms such a big contribution to total revenue that even a small improvement in underwriting performance makes it a big difference to the bottom-line.

The new divisions, like the Paxus information service, which spent nearly NZ\$10m in 1983 on buying up hardware and computer software companies, and investment services, successfully beat the market value of unrealised gains by nearly NZ\$50m in the first six months of the

1983-84 financial year, are the fastest-growing ones. But the general insurance improvement heavily boosted half-year post-tax earnings of over NZ\$21m, an annualised rate of 16.20 per cent on shareholders' funds.

It is traditionally cautious re-insurance policy helped NZ South British survive the shake-up in that market over the last two years but it plans to expand its reinsurance underwriting "with due care and prudence."

Formidable resources

The company suffered heavily in 1982-83 from Cyclone Oscar, which left it with NZ\$24m in claims in Fiji where it was the most-exposed insurer, and with the Australian bushfires (A\$15m gross, reduced to A\$8m through reinsurance).

According to Mr Chalmers, those losses delayed the results of the merger which should have come through last year.

Bearing further underwriting losses, the formidable resources of NZ South British should make it a major force in the financial services area. Until last year the group's share price was depressed, but brokers, who approve of the restructuring, now recommend NZ South British. About the only crime in the company's performance in the past six months has been exchange rate losses of NZ\$3.6m largely because of weakening of the Hong Kong dollar and other Asian currencies.

Signs of revival in KD bond market

By Margaret Hughes
Recently in Kuwait

THE KUWAITI dinar bond market is slowly coming back to life and even foreign borrowers are once again discreetly tapping the market.

Over the past three months there have been two domestic public issues and at least three private placements by foreign borrowers.

In November Charbonnages de France (a previous borrower in the market) and Dow Chemical raised KD 7m (\$23.8m) and KD 5m respectively. The C de F issue carried a coupon of 11 per cent with a 1988 maturity while the Dow Chemical bond was placed with a coupon of 11 per cent for a five-year life.

More recently a private placement of KD 7m was undertaken, a coupon of 10½ per cent is understood to have been arranged for Citicorp. For all three issues the lead manager was Kuwait International Investment (KICI).

Although both the C de F and Dow Chemical bonds are traded in the secondary market, a market is not expected to be made for the Citicorp issue. It is believed that private placements have been arranged for other foreign borrowers over the past few months, though these have not been traded in the secondary market.

After being closed down in late 1979, when dollar interest rates squeezed domestic liquidity, the market was reopened in 1980 under more restrictive guidelines. Eighteen new issues worth KD 11m were announced in the following 18 months, but the market has been moribund since the summer of 1982 when the Souq al Manakh unofficial stock market collapsed. This undermined confidence in dinar bonds along with everything else.

At current interest rate levels raising funds through a Kuwaiti dinar bond issue is cheaper than borrowing in dollars, but it provides funds in a stable currency linked to the dinar, 4% to the dollar through a basket of currencies heavily weighted towards the dollar.

For the investor the yields on dinar bonds, at between 9½ and 10 per cent, are some 250 to 350 basis points higher than on dinar bank deposits. Investors in KD bonds are primarily institutional. The private investor, who does not have access to money at or close to interbank rates, would find his cost of funds higher than the yields offered.

An indication of the level of interest from investors, who with the stagnation of the domestic economy are finding it increasingly difficult to find investment outlets, was the response to the domestic issue announced earlier this month for Industrial Bank of Kuwait. Despite carrying the lowest coupon since 1980-81 per cent, this issue was more than four times oversubscribed.

However, despite the upturn in activity in both primary and secondary market, it seems unlikely that the window will be fully opened to foreign borrowers in the foreseeable future.

Sheikh Ali Al Khalifa Al Sabah, the Finance Minister, said that while he was keen to encourage domestic borrowers, he would "not be very happy for the market to be re-opened to foreign borrowers, in his view the only exceptions would be those undertaking government contracts with receivables in dinars, or governments needing dinars in their currency portfolio (presumably recipients of Kuwait aid or soft loans). Even then, he said, the borrowing would need to be "at a very slow pace and under strict guidelines". However, the Minister will not interfere with private placements as they do not affect the market directly.

Porsche will wait to choose U.S. partner

BY RUPERT CORNWELL IN BONN

PORSCHE, the West German sports car manufacturer, has no new partner in mind for its U.S. sales, following its decision to break off its import and distribution agreement of 15 years with Volkswagen of America.

This was made clear yesterday in Stuttgart by a spokesman for the company, which is owned by the Porsche and Piech families.

But a fuller statement on future plans of Porsche, and on reasons for the split, will only be made later this week. The break takes effect when the current agreement with VW expires on August 31.

The move coincides with the best-

ever performance by Porsche in the U.S., its most important export market. Sales shot up by 51.5 per cent last year to 21,850 units, bringing the total sold through the joint Audi and Porsche sales network of Volkswagen of America since 1969 to 250,000.

The decision will be a big disappointment for VW, which suffered a drop of almost 7 per cent in American sales in 1983. It now plans to set up a separate subsidiary to handle sales of cars produced by Audi, a division of the West German parent.

He said that these sales and recent capital expansion had strengthened the company's financial base.

A group of international banks is

Saga looks for NKr 70m profit

BY FAY GJESTER IN OSLO

SAGA PETROLEUM, the independent Norwegian oil company, expects to make a profit, after year-end allocations, of about NKr 70m (\$8.9m) on its operations in 1983, according to managing director Mr Asbjorn Larsen. This compares with a NKr 53m loss in 1982.

Mr Larsen said the company had received NKr 150m extraordinary income last year from the sale of its interests in projects in Guatemala and in the UK North Sea.

He said that these sales and recent capital expansion had strengthened the company's financial base.

A group of international banks is

UAE in further moves to protect bank depositors

BY OUR ABU DHABI CORRESPONDENT

BANKS in the UAE will be required to seek Central Bank approval before distributing dividends, increasing their capital, or making new share issues, and will be required to consult the Central Bank before finalising or publishing their annual accounts.

The move is the latest in the Central Bank's programme of bank supervision, aimed at conforming to international banking practice in the emirates. Earlier directives included stringent requirements on auditing practices with the publication of accounts in the local Press being mandatory.

The object of the directives is seen as being the protection of depositors. Local banks are being encouraged to raise their reserves in proportion to assets rather than aiming at dividends for shareholders, and the Central Bank is determined to prevent further shocks to the banking system in the wake of UBME's troubles.

Blue Circle South Africa down

BLUE CIRCLE, the South African cement and engineering group which is 55.1 per cent UK-owned saw turnover fall to R296m (US\$82.4m) in 1983 from R305m and pre-tax profit to R8.9m from R12.2m, reports our Johannesburg correspondent.

Debt has risen sharply as Blue Circle has spent R120m in the past three years on expanding its cement production capacity. An unchanged dividend of 38.5 cents has been declared though earnings have fallen to 53.4 cents a share from 8.62 cents.

Cement sales held up well, but the heavy construction equipment market was highly competitive and an expected decline

in interest rates failed to materialise. Interest payments advanced to R16.5m from R13.2m.

Debt has risen sharply as Blue Circle has spent R120m in the past three years on expanding its cement production capacity.

An unchanged dividend of 38.5 cents has been declared though earnings have fallen to 53.4 cents a share from 8.62 cents.

Cement sales held up well, but the heavy construction equipment market was highly competitive and an expected decline

in interest rates failed to materialise. Interest payments advanced to R16.5m from R13.2m.

Debt has risen sharply as Blue Circle has spent R120m in the past three years on expanding its cement production capacity.

An unchanged dividend of 38.5 cents has been declared though earnings have fallen to 53.4 cents a share from 8.62 cents.

Cement sales held up well, but the heavy construction equipment market was highly competitive and an expected decline

in interest rates failed to materialise. Interest payments advanced to R16.5m from R13.2m.

Debt has risen sharply as Blue Circle has spent R120m in the past three years on expanding its cement production capacity.

An unchanged dividend of 38.5 cents has been declared though earnings have fallen to 53.4 cents a share from 8.62 cents.

Cement sales held up well, but the heavy construction equipment market was highly competitive and an expected decline

in interest rates failed to materialise. Interest payments advanced to R16.5m from R13.2m.

Debt has risen sharply as Blue Circle has spent R120m in the past three years on expanding its cement production capacity.

An unchanged dividend of 38.5 cents has been declared though earnings have fallen to 53.4 cents a share from 8.62 cents.

Cement sales held up well, but the heavy construction equipment market was highly competitive and an expected decline

in interest rates failed to materialise. Interest payments advanced to R16.5m from R13.2m.

Debt has risen sharply as Blue Circle has spent R120m in the past three years on expanding its cement production capacity.

An unchanged dividend of 38.5 cents has been declared though earnings have fallen to 53.4 cents a share from 8.62 cents.

Cement sales held up well, but the heavy construction equipment market was highly competitive and an expected decline

in interest rates failed to materialise. Interest payments advanced to R16.5m from R13.2m.

Debt has risen sharply as Blue Circle has spent R120m in the past three years on expanding its cement production capacity.

An unchanged dividend of 38.5 cents has been declared though earnings have fallen to 53.4 cents a share from 8.62 cents.

Cement sales held up well, but the heavy construction equipment market was highly competitive and an expected decline

in interest rates failed to materialise. Interest payments advanced to R16.5m from R13.2m.

Debt has risen sharply as Blue Circle has spent R120m in the past three years on expanding its cement production capacity.

An unchanged dividend of 38.5 cents has been declared though earnings have fallen to 53.4 cents a share from 8.62 cents.

Cement sales held up well, but the heavy construction equipment market was highly competitive and an expected decline

in interest rates failed to materialise. Interest payments advanced to R16.5m from R13.2m.

MORGAN STANLEY

Meet our 21 new Managing Directors.

They represent Morgan Stanley's commitment to providing superior service to clients and customers. Some play key roles in new areas such as commodities, futures, options, tax-exempts and mortgage-backed securities. Others have helped us expand our investment banking, equity and fixed income sales and trading activities, research, and management information systems.

Simply put, they're some of our best investments in the future.

Left to right standing:

Richard A. Smith
Robert A. Metzler
Michael A. Brown
Rodney B. Berens
Dennis G. Sherva
Louis J. Carr Jr.
William B. Cook
David M. Deutsch
Donald P. Brennan
Charles G. Phillips
John W. Barr

convertibles/international securities
equity sales
corporate bond trading
equity block trading
equity research
equity sales/trading
management information systems
tax-exempts
investment banking/forest products
investment banking
investment banking/utilities

Left to right seated:

Robert B. Allardice, III
James Berkowitz
William D. Birch, Jr.
A. Macdonald Caputo
Robert A. Gerard
Eric J. Gleacher
Robert B. Feduniak

Scott C. Newquist
Michael C. Brooks
Robert F. Schiffer

leveraged buyouts
investment banking/technology
mortgage-backed securities

risk arbitrage
OTC trading
international fixed income
individual investor services
tax-exempts
mergers and acquisitions
commodities and futures



UK COMPANY NEWS

Vibroplant recovers and lifts interim

A SUBSTANTIAL recovery has been made by Vibroplant in the half year ended September 30 1983 and the current six months are expected to provide a contribution to profits despite problems in VI Leisure. The directors are forecasting a higher dividend for the year.

For the first half turnover moved ahead from £7.49m to £10.63m and profit advanced from £328,000 to £1.32m. This reflects an increase in demand for plant hire and the elimination of losses from Leisure, and pulls the group back to the level of profits enjoyed in a late 1970s.

Turnover in plant hire was up 26 per cent to £9.1m and profits reached £1.31m, against £906,000, while Leisure traded at a small surplus, compared with a loss of £575,000. Leisure makes video juke boxes for clubs and pubs.

The directors report that since September Vibroplant has continued to trade satisfactorily and should be able to report hire figures for the second half in line with last year. With regard to Leisure, an agreed deal of orders from London and Liverpool Trust has not materialised; as a result Leisure may incur

HIGHLIGHTS

Lex looks at the discussions between Trafalgar House and Scott Lithgow, the ship repair yard, and what the former's strategy may be in this approach before turning to consider an equally surprising purchase of just under 5 per cent—in Powell Duffryn by Hanson Trust. The column then looks at the moves to transform the plantation sector. Finally Lex comments upon the Hong Kong property market. Elsewhere the Arthur Bell-Glenagles battle roles on while Bell acquires a U.S. distributor, and an unexpected deal of the day was gas appliance group, Valor, taking a 29.9 per cent holding in Dreamland. Back onto company news, Vibroplant is making a recovery but in the same breath issuing warnings about the second half, while TV South surprised the analysts with a £51m swing into the black.

Significant losses in the second half which are at present difficult to quantify.

Despite the latter the directors are confident that there will be an overall contribution to group profit from the second half, and that steps being taken will be successful in preventing further Leisure losses beyond the end of the financial year.

The interim dividend is lifted from 2.5p to 3p net, and the directors expect to recommend a final of not less than 5p compared with 4.6375p. In each of

the three years to March 31 1982 the company paid a dividend total of 14.525p.

After tax £688,000 (£55,000 credit and minorities £259,000) (credit £13,000), the net attributable profit came out at £634,000 (£286,000). Earnings are 10.56p (4.76p) and the interim cost is £132,000 (£15,500) after waivers of £48,000 (£4,200).

• comment
In an attempt to find a counter cyclical profits centre to

construction equipment plant hire Vibroplant's controlling Pilkington family embarked upon diversification into video juke boxes. Yet rather than providing a new line of profits the directors have been fighting off a veritable disaster. The venture made a small profit in these figures for the first time, after some film of red ink splashed over the last couple of years. The directors' assertion that the loss is down to £750,000 or so after tax relief is neither here nor there. Did they go into juke-boxes to run up a significant loss? The link with London-based Liverpool has just compounded the problems. They had hoped for 3,000 units to be sold. That may have seemed optimistic with hindsight but perhaps deserving more than the 300 actually sold. Now the second half will see trading losses of £250,000 plus, perhaps, whopping write-downs on £350,000 of stock. Construction equipment should make a profit of £900,000 in the second half though video could still prove a great hole in that. The 6.5 per cent yield is a small prop at 170p. Even with a thin market the price seems to be held up by invisible threads.

Gable House set to 'comfortably exceed' £0.5m

At the annual meeting of Gable House Properties shareholders were told that pre-tax profits for the year to June 30, 1983 would "comfortably exceed" the prospectus forecast of £500,000.

In a statement last December with the preliminary results for 1982/83, showing profits up from £60,000 to £10,000 at the pre-tax level, the directors were confident that figures for the current year would exceed the forecast—the company's shares are traded on the USM.

Referring to Park Saint James, the meeting was told that the company had now accepted an offer of £700,000 for the complete sixth floor of the scheme, and assuming this agreement proceeded satisfactorily through legal implementation, this brought total pre-sales to £2.32m.

Shareholders were informed that the proposed letting of College House, Allerton, had proceeded satisfactorily and Hirschfelds had been instructed to carry out a re-evaluation of the completed investment. The expected re-evaluation surplus would be reflected in the 1984 accounts.

Nova Knit reorganisation benefits coming through

FOR the six months ended September 30 1983 profit of Nova (Jersey) Knit has fallen from £250,000 to £88,000, which, the directors claim, is in line with expectations. They are cutting the interim dividend from 2.5p to 1p net.

However, management accounts for the following three months indicate that the economies of scale extended following the agreement with W. E. Sixby (Nottingham). "The decline in profits reversed."

A reorganisation of its dye-

ing and finishing operation, last summer, the company transferred the stock from its factory in Wigan to Sixby's factory in Nottingham. In the half year reorganisation costs of £381,000 are being charged below the line, against £832,000 a year ago for similar costs in the knitting division.

Tax for the period absorbs £13,000 (£32,000) to leave the net profit at £72,000 (£28,000), and earnings at 2.68p (7.5%). Turnover was £4.44m (£3.23m).

For the year 1982/83 profit fell from £703,000 to £429,000 before reorganisation costs, and the dividend was cut from 5.5p to 4p.

Textured Jersey ahead midway to £193,000

INCREASED PRE-TAX profits were achieved by Textured Jersey for the opening half despite the outbreak of a serious fire at a factory at Corby. Profits rose from £151,000 to £193,000 in the nine months to the end of October 1983.

While it is inevitable that sales for the year will be seriously affected by the aftermath of the fire, the directors say that sales and profits will comfortably exceed levels achieved last year, when full-year pre-tax profits fell to £308,000 (£645,000).

First half turnover of this knitted jersey manufacturer came to £6.66m (£5.3m). The net interim dividend has been reduced to 1.75p. In the last full year a total of 4p was paid.

Operating profits rose from £377,000 to £452,000, from which depreciation took £250,000 (£260,000) and interest £9,000 (same). Tax amounted to £48,000 (£14,000).

Surge halftime for Harvey & Thompson

As indicated at the annual meeting, pre-tax profits of Harvey & Thompson, pawnbroker, have shown a "marked increase" with six-month figures up from £200,000 to £187,000 to December 31, 1983.

For the period absorb £13,000 (£32,000) to leave the net profit at £72,000 (£28,000), and earnings at 2.68p (7.5%). Turnover was £4.44m (£3.23m).

Turnover of this USM concern advanced from £472,000 to £676,000.

The chairman adds that in view of the "continued progress" of Harvey, the directors are paying an interim dividend of 1.5p—last year's single, final payment was 1.5p.

Trading profits amounted to £246,000 (£77,000) and profits were after interest of £59,000, against £45,000. Tax took £30,000 (£10,000), after an extraordinary credit, last year of £18,000, the attributable balance came through ahead from £49,000 to £157,000. Earnings per 20p share were 4.99p (0.97p).

The company's new shop in Birmingham got off to a good start

TV South £4.46m in its first full year

FOR THE 15 months ended October 31 1983 Newman-Tonks Group, metal hardware manufacturer, turned in taxable profits of £3.46m, compared with £2.71m for the previous year, on turnover of £61.87m against £47.12m. Profits and turnover for the 12 months up to July 31 last were £2.58m and £49.05m respectively.

Turnover during the year to October 31, 1983, improved by almost 80 per cent to £51.4m, compared with £28.61m. However, in line with this improvement, other charges have increased, the largest being the group's subscription towards the cost of Channel 4 which is £7.8m higher at £13.81m.

The Exchequer Levy for the year was £2.5m (£1.43m) and tax charged to £1.45m (£1.59m). The interest charge was £171,000 lower at £971,000.

In his statement, Lord Boston, the chairman, reports that advertising revenue increased by 23 per cent over the period and all available advertising time continues to be fully booked. A final dividend of 2p a share is being recommended. Earnings per share rose from 7.6p to 11.32p—the company's shares are traded on the Unlisted Securities Market.

• comment

TV South's £5.5m swing into the black was rather better than the City had expected, so the non-voting shares rose 10p to 100p in the annual review.

Advertising revenue increased by 5 per cent points ahead of the national average to £76.7m, while programme sales rose from £1.5m to £1m. Meanwhile, the move into the new Maidenhurst studio has allowed measurable cost savings. Advertisers appear to have been attracted by TV's split into two regions, which has led to a quadrupling in local advertising revenue. The newly developed afternoon viewing slot has also provided an uplift to billings, while the fact that TV's has a higher share of top socio-economic classes in its region has made its advertising more attractive in terms of the uptake in consumer spending.

The current year, the increase in TV South's channel four subscription should tail off a little, but will still be way ahead of revenue from that source. After a further dip in December, advertising revenue has picked up strongly, indicating a pre-tax turn-around for the year of perhaps 5%. That puts the shares on a multiple of 6.4, assuming a 32 per cent tax charge.

Priest Marians

Priest Marians Holdings, property investment company, returned pre-tax profits of £1.596 for the 10 months to December 31, 1983, compared with losses of £26.724 for the preceding 10 months.

The figures were after deducting gross interest of £12,517 (£12,112), general expenses and pensions of £9,352 (£8,394), property expenses of £13,832 (£12,453) and adding realisation of £12,266 (£17,599 losses).

Net assets at December 31, 1983, were approximately £170,000, including investments at market value of £160,000 (cost £133,000).

Fleming Overseas

Improved net revenue of £1.56m against £1.41m has been shown for the half year to the end of 1983 by Fleming Overseas Investment Trust. Net asset value per 25p share came to 366.1p against 277.4p—at the end of last June the figure was 338p.

Gross income came to £1.06m (£2.93m) from which operating and interest took £108,000 (£177,000). Tax came to £1.31m (£1.05m), and earnings per share came through ahead from 3.16p to 3.49p.

CIL advances

In the 1983 CIL, the Canadian arm of Imperial Chemical Industries, advanced its net operating income from £15.1m to £28.3m, equal to \$1.36 (82 cents) per share.

The figures reflect a recovery in the paints, plastics, and specialty chemicals business. But industrial chemicals, explosives and mining equipment remained depressed, and margins in farm chemicals were tight. Sales totalled \$1.1bn, against \$1.06bn.

The directors are expecting a further recovery in 1984 but point out that businesses serving the energy industries, particularly mining and metals, may not improve much until the second half.

Grindlays Eurofinance B.V.

U.S.\$ 100,000,000

Guaranteed Floating Rate Notes 1994

Guaranteed on a subordinated basis by

Grindlays Bank p.l.c.

In accordance with the provisions of the Notes, notice is hereby given that for the interest period 1st February, 1984 to 1st August, 1984 the Notes will bear an interest rate of 10.1% per annum.

The interest payable on the relevant Interest Payment Date, 1st August, 1984 against Coupon No. 1 will be U.S.\$11.88.

Agent Bank

Grindlays Bank p.l.c.

Grindlays Eurofinance B.V.

U.S.\$ 100,000,000

Guaranteed Floating Rate Notes 1994

Guaranteed on a subordinated basis by

Grindlays Bank p.l.c.

In accordance with the provisions of the Notes, notice is hereby given that for the interest period 1st February, 1984 to 1st August, 1984 the Notes will bear an interest rate of 10.1% per annum.

The interest payable on the relevant Interest Payment Date, 1st August, 1984 against Coupon No. 1 will be U.S.\$11.88.

Agent Bank

Grindlays Bank p.l.c.

Grindlays Eurofinance B.V.

U.S.\$ 100,000,000

Guaranteed Floating Rate Notes 1994

Guaranteed on a subordinated basis by

Grindlays Bank p.l.c.

In accordance with the provisions of the Notes, notice is hereby given that for the interest period 1st February, 1984 to 1st August, 1984 the Notes will bear an interest rate of 10.1% per annum.

The interest payable on the relevant Interest Payment Date, 1st August, 1984 against Coupon No. 1 will be U.S.\$11.88.

Agent Bank

Grindlays Bank p.l.c.

Grindlays Eurofinance B.V.

U.S.\$ 100,000,000

Guaranteed Floating Rate Notes 1994

Guaranteed on a subordinated basis by

Grindlays Bank p.l.c.

In accordance with the provisions of the Notes, notice is hereby given that for the interest period 1st February, 1984 to 1st August, 1984 the Notes will bear an interest rate of 10.1% per annum.

The interest payable on the relevant Interest Payment Date, 1st August, 1984 against Coupon No. 1 will be U.S.\$11.88.

Agent Bank

Grindlays Bank p.l.c.

Grindlays Eurofinance B.V.

U.S.\$ 100,000,000

Guaranteed Floating Rate Notes 1994

Guaranteed on a subordinated basis by

Grindlays Bank p.l.c.

In accordance with the provisions of the Notes, notice is hereby given that for the interest period 1st February, 1984 to 1st August, 1984 the Notes will bear an interest rate of 10.1% per annum.

The interest payable on the relevant Interest Payment Date, 1st August, 1984 against Coupon No. 1 will be U.S.\$11.88.

Agent Bank

Grindlays Bank p.l.c.

Grindlays Eurofinance B.V.

U.S.\$ 100,000,000

Guaranteed Floating Rate Notes 1994

Guaranteed on a subordinated basis by

Grindlays Bank p.l.c.

BIDS AND DEALS

First half £0.9m rise for Stock Conversion

PRE-TAX profits of Stock Conversion and Investment Trust rose by £851,000 to £7.75m for the six months ended September 30, 1983 and the interim dividend is being lifted 2.6p to 2p net per 25p share.

The amount of final will be determined in the light of the full year result and the circumstances prevailing—the total distribution of 4.75p was paid previously.

Group profits for the opening half improved from £5.86m to £6.04m, and included dealing profits of £19,000 compared with £16,000 in the previous period added £286,000 more at £1.71m.

Tax accounted for £3.84m, against £3.65m, and minorities rose from £175,000 to £194,000. At the attributable level, profits emerged £600,000 ahead of £16.72m taken in hand and ordinary credits of £586,000 (£50,000), being the surplus over valuation on investment property disposals.

Earnings came through at 7.11p (£3.87p) per share—the company's business property investment, development and design also includes investment in securities and insurance broking.

Macanie defers stock exchange

Because of the possibility of adverse tax effects, Macanie (London) has adjourned the meetings called to approve the exchange of stocks with Courtaulds, its parent company. The directors are awaiting clarification of the position.

The meetings were fixed for yesterday to consider exchanging 1,000 of Macanie's 71 per cent unsecured stock 1984-81 and 71 per cent unsecured loan stock 1985-1991 for £112.50 and £111 respectively of Courtaulds' 71 per cent unsecured loan stock 1984-96.

The directors explain that recently published draft tax legislation could lead to the classification of the stock being offered in exchange as a "deep discount issue". If such legislation was implemented in its present form, there could be adverse tax consequences to certain categories of investor who could be liable to income or corporation tax on gains arising from the disposal or redemption of the Courtaulds stock.

Assurances have been sought from the Inland Revenue that such treatment would not apply in the circumstances of these proposals, but these have not been forthcoming.

Ruo Estates

On turnover that was up by less than 50 per cent, Ruo Estate Holdings managed to double its pre-tax profit for the year ended June 30 1983. Turnover for the year was £2.88m (£2.01m), while pre-tax profit increased by £756,000 to £1.2m. There was a tax charge of £751,000 (£364,000) leaving earnings per share at 45p (22.6p). A final dividend of 5p (4p) has been declared, making a total of 7p (4p).

Streetley

Streetley intends to build a 50m brick capacity works on a site in North Staffordshire, producing simulated hand-made bricks. Completion is for 1985, will set high standards of energy efficiency.

The plant, costing £1m, follows the construction of a new brick-making plant at Toddbits, Bishop Auckland, completed in July 1983 and the rebuilding now in progress of a clay roofing tile plant at Keele, North Staffordshire.

0222-495507
HOT-LINE
for
Company Searches

£
Search and full accounts 12.50
Search only 9.50
Accounts only 7.50
Fiche 2.50
+VAT
Call us today!

BRENTORIAN LIMITED
372 Newport Road, Cardiff
CF3 7UG

KANSASIS-OSSAKE-PANKKI
US\$100,000,000
Floating Rate Capital Notes
Interest 1984-85

In accordance with the provisions of the Notes, notice is hereby given that the Rate of Interest for the first interest Period has been fixed at 10% per cent per annum. The Coupon amount will be US\$22.34 for the US\$12,867.19 for the US\$250,000 denomination and will be payable on 1st August 1984 against the surrender of Coupon No. 1. Manufacturer: Kansasis Limited Agent: Bank

LADBROKE INDEX
831-833 (-4)
Based on FT Index
Tel: 01-531 5261

H & C £20m Malaysian sale talks

BY DAVID DODWELL

HARRISONS & CROSFIELD, the plantations, chemicals and timber group, has begun talks which may lead to the sale of stakes held directly or indirectly—in 10 Malaysian plantations companies. The deals could be worth more than £20m for Harrisons.

The move is aimed at further strengthening local control of Malaysian plantations companies which were once part of the Harrisons & Crosfield group in Malaysia.

It follows directly from the sale to Permodalan Nasional Berhad, Malaysia's national investment agency, of its controlling stake in Harrisons and Sons Plantations (HMP) in September 1982. That deal earned Harrisons & Crosfield about £1.6m.

HMP revealed in Kuala Lumpur that it had begun talks

with its one-time parent on a deal for the plantation companies. Payment would be in the form of both cash and shares.

The companies were Castlefield (Klang) Rubber Estate, Holroyd Rubber, Kuala Selangor Rubber, Segombong Group, Nimo Allam Rubber Estate, Sime Darby Rubber Estates, Doramasand Rubber Estates and Malaysia Rubber—all quoted on the London Stock Exchange—and two unlisted companies, Edensor Rubber Estates and Nalek Rubber Estates.

Harrisons & Crosfield has direct or indirect stakes in all of these companies. Two are simply holding companies with outplantation interests—Doramasand and Malaysia Rubber.

It is anticipated that no deal is likely to be completed before the middle of Spring. Mr Prentice, Harrisons chairman said in London yesterday that discussions on a price for each of the companies have yet to take place. HMP is due to pursue talks with each company separately.

It is expected that no deal is likely to be completed before the middle of Spring. Mr Prentice, Harrisons & Crosfield nevertheless holds a stake. HMP acts as managing agent for all of the companies.

Share values in several of the companies are up recently. Sime Darby is up 50% to 850p, Doramasand by 25p to 195p, Nimo Kellay by 25p to 280p, Holroyd by 50p to 500p.

The aggregate value of the companies in terms of market capitalisation is about £61.5m. However, substantial cross-holdings means the true market capitalisation is lower.

Tom Prentice, Harrisons chairman said in London yesterday that discussions on a price for each of the companies have yet to take place. HMP is due to pursue talks with each company separately.

It is expected that no deal is likely to be completed before the middle of Spring. Mr Prentice, Harrisons & Crosfield nevertheless holds a stake. HMP acts as managing agent for all of the companies.

at least £20m. He could not disclose whether Harrisons would retain its interest in the companies HMP sought to buy.

In September 1982, Harrisons sold 58 per cent of the shares in what was then Permodalan Malaysian Estates to Permodalan.

It has retained 30.3 per cent stake.

Malaysian financial circles say that rubber companies concerned have recently updated their valuation, and huge surpluses have been thrown up considering that many of them have land which are ripe for property development.

HMP is now Malaysia's largest plantation group with nearly 220,000 acres, following its M\$195m (£157.1m) takeover of Barlow Plantations last April.

HMP has a paid-up of M\$356m, and a current market capitalisation of nearly M\$2bn.

Caparo aid for Brockhouse

BY DAVID DODWELL

MR SWAJ PAUL'S Caparo Group revealed yesterday that it has offered to inject £5m of new share capital into Brockhouse, loss-making Birmingham-based engineering transport and building materials group, in a deal which would give Caparo effective control of the group.

He told shareholders at Brockhouse's annual meeting that while current trading was "up to expectations," cash flow was slipped by 5p to 32p on the

news, while Caparo's shares improved by 6p to 43p. The Takeover Panel indicated yesterday that, subject to shareholder approval, it would be prepared to allow the deal to go through.

Mr Reg Parkes, chairman of Brockhouse, said yesterday that he had not had the opportunity to see Caparo's proposals in detail and was therefore not in a position either to recommend or contest the terms.

He told shareholders at Brockhouse's annual meeting that while current trading was "up to expectations," cash flow was slipped by 5p to 32p on the same period.

Bell in £12m U.S. expansion

BY DAVID DODWELL

ARTHUR BELL, Scotch whisky distillers, has agreed to acquire Wellington Importers to act as its distributor in the U.S. in a deal worth £16.5m (£11.7m).

Wellington, based at Lake Success in New York, imports wines and spirits into the U.S., and owns the brand names Bell's and Boucheron. Bell said yesterday that the company would expand its own product range as well as distribute Bell's products in the U.S.

The deal is to be funded in part by a \$12m seven-year loan facility in New York, and in part from Bell's own resources. It comes just a week after Dis-

tillers, another Scotch whisky manufacturer, revealed it was negotiating to acquire Somerset Importers in a deal which could be worth more than £200m.

Mr Miguel, Bell's chairman, said yesterday that sales to the U.S. accounted for a "negligible" share of Arthur Bell's £37m export orders last year.

Over the past decade, Bell's has shifted from Heublein Inc, which distributes Schenckel in the U.S., to Jim Beam, and finally to Monsieur Henri Wines, in its search for an effective distribution operation in the U.S.

The arrangement with

Monsieur Henri, which is a subsidiary of Pepsico International, ended in September and has been allowed to lapse.

Mr Miguel said Bell's were keen to develop Wellington, and that fresh appointments to the company could be expected. Bell's plans to spend £2m on advertising in the U.S. in 1984.

Bell's are close to succeeding in a hotly contested £27m bid for control of the Glencairn Hotel group, the privately owned Scottish hotels group which was acquired from British Rail by 17 institutional shareholders in 1981.

The deal is to be funded in part by a \$12m seven-year loan facility in New York, and in part from Bell's own resources. It comes just a week after Dis-

tilers, another Scotch whisky manufacturer, revealed it was negotiating to acquire Somerset Importers in a deal which could be worth more than £200m.

Mr Miguel said Bell's were keen to develop Wellington, and that fresh appointments to the company could be expected. Bell's plans to spend £2m on advertising in the U.S. in 1984.

Bell's are close to succeeding in a hotly contested £27m bid for control of the Glencairn Hotel group, the privately owned Scottish hotels group which was acquired from British Rail by 17 institutional shareholders in 1981.

The deal is to be funded in part by a \$12m seven-year loan facility in New York, and in part from Bell's own resources. It comes just a week after Dis-

Valor lifts Dreamland stake

BY CHARLES BATCHELOR

VALOR, the manufacturer of gas heaters and cookers, has acquired a further 5.5m shares of Dreamland Electrical Company, the electric blanket maker, taking its holding to 29.9 per cent.

Mr Michael Montague, Valor chairman, said: "We are looking at spreading further into the electrical market and this block of shares was an opportunity."

The gas appliance group bought the shares from Grove-

wood Securities, a subsidiary of the Eagle Star insurance group, for 25p each. Valor previously had 900,000 Dreamland shares.

Dreamland's shares rose 10p to 29p, a new 1983/84 high, while Valor was unchanged at 12.6p.

Mr Montague, Valor chairman, said: "We are looking at spreading further into the electrical market and this block of shares was an opportunity."

"I could not comment on

whether or not there might be a bid. We will look at any situation as it develops in the interests of our shareholders."

Dreamland's profits fell in 1982 and the company made a pre-tax loss of £261,000 in 1983. After recovering to a small profit of £56,000 in 1982, in the first nine months of 1983 it recorded a pre-tax profit of £294,000, against a loss of £561,000 in the comparable period.

Discussions have already begun on the sale of these shops at a price which would produce a substantial surplus over asset value and the goodwill element is expected to significantly exceed associated redundancy costs,梦纳德斯 said.

Mr Carter said in his letter to the shareholders that the board remains opposed to Mr Carter's proposal, however, if he extended it to the entire ordinary capital. It is currently for 51.6 per cent of the equity.

Mr Carter is also offering 100p cash for the preference shares.

梦纳德斯 rejected Mr Carter's claim that it held too high a stake and that the expected number of rent reviews due on its properties were out of the ordinary.

梦纳德斯 shares were unchanged at 24.5p yesterday.

It defended its policy of selling off its newsagents shops on a piecemeal basis. Fifty-eight shops have been sold over the past two years and a further 40 have been placed for sale with agents.

梦纳德斯 expects to open six and eight new stores in 250-300 sq ft in the year beginning July 1984, it said.

In a letter to shareholders Maynard said that in the sweet-making field it had launched 12 new products over the past two years and improved the presentation of many lines.

Maynard listed other recent achievements for the exclusive UK distribution of the Royal Norwegian Confectionery Company; increases in export sales and of "own label" products to major UK retailers; and manufacturing improvements which have been attained through a 23 per cent reduction in the workforce.

Maynard's shares were unchanged at 24.5p yesterday.

It defended its policy of selling off its newsagents shops on a piecemeal basis. Fifty-eight shops have been sold over the past two years and a further 40 have been placed for sale with agents.

梦纳德斯 expects to open six and eight new stores in 250-300 sq ft in the year beginning July 1984, it said.

In a letter to shareholders Maynard said that in the sweet-making field it had launched 12 new products over the past two years and improved the presentation of many lines.

Maynard listed other recent achievements for the exclusive UK distribution of the Royal Norwegian Confectionery Company; increases in export sales and of "own label" products to major UK retailers; and manufacturing improvements which have been attained through a 23 per cent reduction in the workforce.

Maynard's shares were unchanged at 24.5p yesterday.

It defended its policy of selling off its newsagents shops on a piecemeal basis. Fifty-eight shops have been sold over the past two years and a further 40 have been placed for sale with agents.

梦纳德斯 expects to open six and eight new stores in 250-300 sq ft in the year beginning July 1984, it said.

In a letter to shareholders Maynard said that in the sweet-making field it had launched 12 new products over the past two years and improved the presentation of many lines.

Maynard listed other recent achievements for the exclusive UK distribution of the Royal Norwegian Confectionery Company; increases in export sales and of "own label" products to major UK retailers; and manufacturing improvements which have been attained through a 23 per cent reduction in the workforce.

Maynard's shares were unchanged at 24.5p yesterday.

It defended its policy of selling off its newsagents shops on a piecemeal basis. Fifty-eight shops have been sold over the past two years and a further 40 have been placed for sale with agents.

梦纳德斯 expects to open six and eight new stores in 250-300 sq ft in the year beginning July 1984, it said.

In a letter to shareholders Maynard said that in the sweet-making field it had launched 12 new products over the past two years and improved the presentation of many lines.

Maynard listed other recent achievements for the exclusive UK distribution of the Royal Norwegian Confectionery Company; increases in export sales and of "own label" products to major UK retailers; and manufacturing improvements which have been attained through a 23 per cent reduction in the workforce.

Maynard's shares were unchanged at 24.5p yesterday.

It defended its policy of selling off its newsagents shops on a piecemeal basis. Fifty-eight shops have been sold over the past two years and a further 40 have been placed for sale with agents.

梦纳德斯 expects to open six and eight new stores in 250-300 sq ft in the year beginning July 1984, it said.

In a letter to shareholders Maynard said that in the sweet-making field it had launched 12 new products over the past two years and improved the presentation of many lines.

Maynard listed other recent achievements for the exclusive UK distribution of the Royal Norwegian Confectionery Company; increases in export sales and of "own label" products to major UK retailers; and manufacturing improvements which have been attained through a 23 per cent reduction in the workforce.

Maynard's shares were unchanged at

MINING NEWS

APPOINTMENTS

Cominco expecting a better year

BY KENNETH MARSTON, MINING EDITOR

FOURTH quarter 1983 results now flowing from the transatlantic natural resource majors make mixed showing. But at least Canada's Cominco metals and chemicals group says that it expects an improvement this year on the basis that economic growth in north America is expected to continue and other western economies should improve.

Thanks to income tax credits of C\$1.7m (£971,000) Cominco came out with a profit of C\$1.1m in the fourth quarter. This reduced the total loss for

1983 to C\$33.3m compared with the loss of C\$31.2m in 1982. The latter figure being struck after an extraordinary gain of C\$18.1m on the sale of U.S. oil and gas properties.

Cominco which is controlled by the Canadian Pacific group, says that its U.S. subsidiary, Cominco American, has agreed to sell its interest in a small tertiary oil recovery project in Texas for C\$9.5m. The resultant net profit on the deal of about C\$5m should come into the current quarter's accounts.

Of the two lead-zinc producers

in the Cominco group, Vestron Mines, which operates the Black Angel mine in Greenland, made a fourth quarter net profit of C\$2.9m (£1.63m) when sulphur shipments recovered sharply as a result of an anticipated revival in demand for fertiliser. Freeport-McMoRan

America's Freeport-McMoRan has been keeping its head above water. "All in all, 1983 was a solid year for FMI," says Mr Benno C. Schmidt, the chairman and chief executive, looking at the results in the context of price weakness in sulphur and

phosphoric acid earlier in the year, low copper prices and moderate prices for gold.

Following a fourth quarter net profit of C\$22.9m (£12.3m) when

Metals Ex and North Kalgurli improvements

AUSTRALIA'S Metals Exploration reports a half-year net profit of A\$19.000 (£12.9m) compared with a loss of A\$20.2m a year ago. At the same time, the turnover dropped to A\$54.000 from A\$72, reflecting the policy of retrenchment and cost cutting in a recovery in metal markets. Because of low prices for nickel the small, but good grade, Nepean in Western Australia remains closed.

Metals Exploration's unconsolidated subsidiary, Metals Exploration Queensland, holds 50 per cent of the struggling Grasberg Nickel-Cobalt mine in Queensland, the remaining 50 per cent being held by Freeport-McMoRan.

Last year Grasberg cut its

planned production by half in order to reduce losses. As a result Metals Exploration's share of the losses in the six months to December 31 fell to A\$18.6m against A\$24.4m the same period the previous year.

Metals Exploration also has a 29 per cent stake in the gold-producing North Kalgurli Mines. The problem here is that the latter is having to spend heavily on underground development work although this will pay off in the longer term.

The company also sells its gold forward and helps by a higher silver price obtained it reduced its operating loss in the half-year to A\$85.000 from a loss of A\$1.06m in the same period of 1982.

Associated Pulp boosts NBH profits midterm

INVESTMENT INCOME has been supplemented by sales of mineral concentrates recorded a loss of A\$642,000 in the past three months. Future mine earnings, the company said, will depend on metal prices and the containment of costs.

Net profits for the half-year came out at A\$24.4m, up from A\$10.4m in the previous half. The latest profits were boosted by an extraordinary credit of A\$87.900 from the mining surplus on disposal of North Broken Hill's shareholding in Olympic last November.

The interim dividend is lifted to 4 cents per share from 3 cents last year.

The company said that the full-year results will "substantially exceed" those for the previous year if present conditions continue. Profits are now dependent on the results of the group's associated companies, rather than on investment in new projects, line with the philosophy outlined at last November's annual meeting.

Mr Gerald W. French, director of B.C.I.A., is to retire at the end of the year. The general secretary, Mr John R. Wilson, has been appointed deputy director and will become director on January 1 1985. Mr M. J. Morgan and Mr B. A. Barrett have become vice-chairmen.

Mr Richard F. Colker has joined the international corporate finance department as executive director of KIDDIE PEABODY INTERNATIONAL in London from Banque de la Societe Financiere Europeenne.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The area is located within mining prospects covered by a joint exploration venture between MMC and Kelantan state.

The initial exploration work has been carried out by Kampong Lanjut Tin Dredging, a 43 per cent-owned associate of MMC.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

The reserves could support a small-scale mining operation for at least five years, according to the company.

</

NEW YORK STOCK EXCHANGE 26-28
AMERICAN STOCK EXCHANGE 27-28
WORLD STOCK MARKETS 28
UNIT TRUSTS 32-33
COMMODITIES 34
CURRENCIES 35
INTERNATIONAL CAPITAL MARKETS 36

SECTION III - INTERNATIONAL MARKETS

FINANCIAL TIMES

Tuesday January 31 1984

Japanese to increase
Samurai bond
issues, Page 36

WALL STREET

Reagan role in rally is short-lived

PRESIDENT Reagan's confirmation that he will seek re-election to the White House this autumn proved little solace for Wall Street, where a further bout of selling took the stock market down to its lowest level for two and a half months. However, a rally in the final half hour cut losses by about one third, writes *Terri Byland in New York*.

The market opened higher but swiftly turned down when the sellers reappeared. Increased selling in the latter part of the session drove the Dow Jones industrial average down by more than 12 points at one time, before some bargain hunting in the final 30 minutes left the Dow Jones industrial average at a closing level of 1,231.52, a net 8.48 down. Turnover was heavy, with 102m shares traded.

Views of the outlook for interest rates continued to diverge, with some quarters believing that the slowing down in economic growth will permit rates to ease, while others see a tightening of Federal Reserve credit policies this year.

With a number of factors urging caution this week, bond prices held steady for much of yesterday's session. The

Fed's Open Market Committee met yesterday and will convene again today.

On balance, the market expects little change in Fed policies to emerge from the meetings. But tomorrow is expected to bring details of the Treasury's \$15bn - \$16bn funding programme for the next quarter, which could put upward pressure on interest rates.

The stock market opened with a burst of strength, spurred on by Friday's news of a \$2.7bn fall in M1 money supply for the week. Trading was brisk, but buyers were mostly those needing stock to meet selling deals made during last week's fall in the market.

When these professional operations were completed, selling recommenced and prices fell smartly. With the final quarter reporting season for 1983 now half completed, the stock market is looking at a downturn in profits from the previous quarter, which has undermined the prospects for an earnings-driven gain in the market.

Once again, IBM gave ground, shedding \$1% to \$113%. Major institutions have been selling IBM stock, attracted by the sizeable profit available on their holdings.

Other leading issues to meet fresh selling pressure included General Electric, \$4 off at \$334, Minnesota Mining and Manufacturing, \$4 down at \$76%, Hercules \$1% lower at \$333% and Motorola, \$1% down at \$120%.

Selling of both airline and railroad issues contributed to a fall of more than 3 per cent in the Dow Jones transportation average.

Top of the active list by a wide margin was Texaco, after a 5.1m share block changed hands, putting the price \$24 up at \$374. Investors took the view that Texaco's \$90m sale of some overlapping assets of Getty Oil will ensure that the merger goes through without anti-trust problems.

Energy and technology issues remained active. Wang Laboratories, \$4 up at \$304, and Tie Communications, \$4 off at \$224, were prominent spots.

In other sectors of the New York Stock Exchange, the American Stock Exchange and the Nasdaq over-the-counter market, prices showed widespread falls.

Texas Instruments, \$1% off at \$130, U.S. Steel, \$3 down at \$304, and Monsanto, \$1% off at \$954 were among those lack support.

The firm sector was oils, still hoping for further bid moves at prices which would benefit both the low priced domestic groups likely to be the targets, and the major oil companies, likely to be leading the buying.

In the credit markets, prices were better where changed but there was a general inclination to await Wednesday's news on Treasury funding.

At 102%, the key long bond yielded 11.75 per cent, having fallen 1% from Friday's closing price after the money supply announcement.

The Federal Reserve helped the short end of the market with \$1.5bn customer repurchases, when the federal funds rate touched 9% per cent. Treasury bill rates hardly changed.

EUROPE

Banks and insurers fare best

THE REFERENCE points for investors on the European bourses yesterday lay across the Atlantic - in the form of the Reagan candidacy and a \$2.7bn fall in M1 money supply - but ahead of Wall Street's own reaction a reluctance could be felt to commit any sizeable fresh funds.

A third U.S. influence, a weakening dollar as selling pressure developed out of New York, became clear only at or near the close. Nonetheless, earlier indications that no further severe inroads were being made on domestic currencies appeared to aid sentiment.

Banking and insurance issues in many centres underwent something of a revaluation, providing a handful of the day's better gains.

Banking and insurance issues in many centres underwent something of a revaluation, providing a handful of the day's better gains.

In the respective sectors, Amsterdam showed ABN up F1 10 to F1 445 and Amro F1 1.70 ahead at F1 82; Nat Ned F1 3 stronger at a record F1 241 and Aegon firming F1 3.50 to F1 42.50.

Other prominent advances during an active session were F1 7.70 for Akzo in chemicals at F1 123.20, and F1 6.10 by KLM at F1 232.60. Domestic bonds put on some 20 basis points.

Deutsche Bank featured Frankfurt with a DM 8 jump to DM 390.50, while BHF was up DM 4 at DM 304. Munich Re added DM 15 to DM 1,345 but Allianz, its associate, eased DM 1.50 to DM 826.50 amid confusion over its U.S. intentions.

Early buoyancy gave way all round to profit-taking, but renewed support emerged later. Bonds firmed too, and the Bundesbank sold DM 16.2m in public paper.

A doubling of capital proposed by Credito Italiano prompted a Milan mark-up of its shares by L120 to L4,870, and expectations of similar moves took Banca Commerciale L1,650 higher to L37,650.

Of the insurers Generale gained L1,000 to L38,800 and Toro L50 to L14,000. Industrials were quiet, with Fiat L30 ahead at L4,080, and bonds were active but mixed.

The financial side was favoured too in a steady Zurich session, where Crédit Suisse firmed SwFr 20 to SwFr 2,335 and Zurich Insurance climbed SwFr 200 to SwFr 18,500.

Bonds were quietly steady. An inflow of foreign orders helped

Continued on Page 28

SOUTH AFRICA

BUYING SUPPORT from London helped Johannesburg gold mining stocks, but most slipped from their day's high and in some cases shaded easier.

Buffs held unchanged at R58 as Free State Geduld slipped 25 cents to R42.75. Other minings were largely unchanged. The star performer of the day was Anglo-American Gold with a R3.50 gain to R133.

CANADA

WEAKNESS in gold issues undermined most other resource oriented share sectors in Toronto. Base metal producers were also very prominent in the decline.

Some firmness in Montreal industrials and banks offset largely unchanged papers but much more fragile utilities.

TOKYO

Electricals dim after early spark

SELECTIVE buying of blue-chip issues persisted in early Tokyo trading yesterday - particularly among electrical stocks - but the trend tapered off later as investors moved to the sidelines for a corrective fall, writes *Shigeo Nishiwaki of Jiji Press*.

The Nikkei-Dow market average ended the morning session just over 63 points higher than last week's close, but lost strength gradually, closing the day at 10,235.73, up 29.26. Turnover came to 285.10m shares, a substantial decrease from last Friday's 429.89m shares.

The index thus hit an all-time high for the fourth straight session. But dealers outnumbered advances 354 to 341, with 144 issues unchanged.

The sizeable decline in the M1 measure of the U.S. money supply for the latest reporting week, combined with President Ronald Reagan's announcement of his intention to run for re-election, touched off expectations of a rally on Wall Street later yesterday. As a result, active buying of blue chips carried over from last week.

Among notable gainers was Sony, which had been out of investor favour because of a slack performance in its video cassette recorder division. Sony advanced Y250 at one stage and ended Y20 higher at Y4,000, regaining the Y4,000 level for the first time since November 1982.

Matsushita Electric Industrial rose some Y170 to Y2,030 in early trading, but the profit-taking left a closing Y1,990, a gain of Y30. NEC added Y30 to Y1,540 and Canon Y20 to Y1,590.

Nissan Motor climbed Y24 to Y765 on reports, unconfirmed at the time, that it had decided to produce a small passenger car in Britain. Trading volume was small, however.

The market lost ground in the afternoon, discouraged by growing investor concern over a reactionary decline and

concern over a corrective fresh funds.

A third U.S. influence, a weakening dollar as selling pressure developed out of New York, became clear only at or near the close. Nonetheless, earlier indications that no further severe inroads were being made on domestic currencies appeared to aid sentiment.

Banking and insurance issues in many centres underwent something of a revaluation, providing a handful of the day's better gains.

In the respective sectors, Amsterdam showed ABN up F1 10 to F1 445 and Amro F1 1.70 ahead at F1 82; Nat Ned F1 3 stronger at a record F1 241 and Aegon firming F1 3.50 to F1 42.50.

Other prominent advances during an active session were F1 7.70 for Akzo in chemicals at F1 123.20, and F1 6.10 by KLM at F1 232.60. Domestic bonds put on some 20 basis points.

Deutsche Bank featured Frankfurt with a DM 8 jump to DM 390.50, while BHF was up DM 4 at DM 304. Munich Re added DM 15 to DM 1,345 but Allianz, its associate, eased DM 1.50 to DM 826.50 amid confusion over its U.S. intentions.

Early buoyancy gave way all round to profit-taking, but renewed support emerged later. Bonds firmed too, and the Bundesbank sold DM 16.2m in public paper.

A doubling of capital proposed by Credito Italiano prompted a Milan mark-up of its shares by L120 to L4,870, and expectations of similar moves took Banca Commerciale L1,650 higher to L37,650.

Of the insurers Generale gained L1,000 to L38,800 and Toro L50 to L14,000. Industrials were quiet, with Fiat L30 ahead at L4,080, and bonds were active but mixed.

The financial side was favoured too in a steady Zurich session, where Crédit Suisse firmed SwFr 20 to SwFr 2,335 and Zurich Insurance climbed SwFr 200 to SwFr 18,500.

Bonds were quietly steady. An inflow of foreign orders helped

Continued on Page 28

increased sales of blue-chip electricals for profits.

TDK jumped Y200 in morning transactions, but finished Y80 lower at Y6,840. Hitachi shed Y17 to Y881 and Pioneer Electronic Y60 to Y3,790.

Conversely, speculative issues drew interest, with Aoki Construction rising Y30 to Y810, Arabian Oil Y180 to Y5,280 and Denki Kagaku Kogyo Y21 to Y474.

The bond market remained lacklustre. Although some corporations with surplus funds bought long-term issues, other investors generally adopted a hands-off attitude.

The yield on the barometer 7.5 per cent government bonds, maturing in January 1983, remained unchanged from last week's close at 7.415 per cent.

LONDON

Nervousness edges leaders to sidelines

SPECULATIVE activity highlighted yesterday's first session of a new fortnightly trading account in London equity markets. Leading shares were pushed to the sidelines and became highly nervous late in the day.

Reflecting the lack of institutional enterprise, top-name shares were unable to maintain an early extension of Friday's after-hours strength and the FT Industrial Ordinary index finished the day 7.3 lower at 832.2.

Blue chip industrials, which had recently attracted above average support, began to look tired, although little selling developed. Hawker Siddeley encountered fresh American demand and, helped by vague talk of a possible transatlantic bid, surged higher initially and closed up 6p at 414p after 42p.

The electrical sector's weakness was in fact one of the principal factors leading to a nervous after-hours trade in equities as a whole.

Gilt-edged securities traded quietly but moved higher in line with Liffe market.

Longer-dated stocks gained 1% in places and the government broker ran

out of supplies of the recently created £100m tranches of Treasury 9% per cent 1999, at 94%; he remained open to bids for stock of Treasury 9% per cent 1988 and Treasury 9% per cent 1992/96, tranches of which were also made available to the market on last Tuesday.

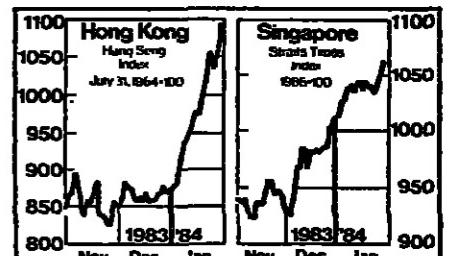
Details, Page 29, Share Information Service, Pages 30-31.

HONG KONG

THE STRONGEST showing so far this year followed one-point prime rate cuts by Hong Kong banks for the second consecutive Monday. The Hang Seng index soared 42.36 to a six-month high of 1,097.63, and dealers expected that resistance at the 1,100 level would be offset by a bullish view of the local property market expressed later by the colony's valuation commissioner.

Property-related issues fared well ahead of this: Cheung Kong put on 50 cents to HK\$9.95, Swire Properties 15 cents to HK\$6.70 and Hongkong Land 40 cents to HK\$4.30.

The rate cuts were adjudged no strain on the banks. Hong Kong and Shanghai added 20 cents to HK\$8.80 and Hang Seng 50 cents to HK\$45.25.



SINGAPORE

ANOTHER active session took Singapore further upward as the Chinese new year approached, but profit-taking was felt amid the buying support.

The Straits Times industrial index rose 12.31 to 1,063.88, while the wider SE industrial/commercial index put on a more moderate 2.41 to 804.31, both new

year's best.

Supreme Corporation, the day's most active, firmed 2 cents to SS2.15. Chuan Hup Marine jumped 16 cents to SS4.10. Banks were weak, with OCBC off 20 cents to SS1.50.

ECONOMIC COMMUNITY OF WEST AFRICAN STATES

Ecowas Telecommunications Project

— Intelcom 1 (phase B)

INVITATION TO TENDER

The executive secretariat of the Economic Community of West African States invites to international tender on 31st January, 1984, under its regional telecommunications project Intelcom 1, Phase B. Facilities to be provided under this invitation to tender are to be financed by the European Investment Bank.

This invitation to tender is for the supply, installation and commission of equipment for two microwave links consisting of the following:

Lot 1—Kaolack (Senegal)—Banjul (Gambia)—Cachet (Guinea-Bissau)

Lot 2—Tambacounda (Senegal)—Mali (Guinea)

The invitation to tender is opened to at least contracting firms from the European Economic Community (EEC) and from the African, Caribbean and Pacific States (ACP) signatories of the second Lome convention.

Documents in English and French for Lot 1 and in French only for Lot 2 are available for inspection and may be obtained from the following addresses:

Ecowas Executive Secretariat
Department of Transport, Telecommunications and Energy,
6, King George V Road,
Lagos, Nigeria
Telex: 22633 Ecowas Ng

Ecowas Fund
Avenue Du 24 Janvier opposite Centre Culturel Franca

NEW YORK STOCK EXCHANGE COMPOSITE CLOSING PRICES

Kidder, Peabody Securities Limited

Market Makers in Euro-Securities

An affiliate of

Kidder, Peabody & Co. Incorporated

Founded 1865

Continued on Page 27

طهراً من الدليل

AMERICAN STOCK EXCHANGE COMPOSITE CLOSING PRICES

Continued on Page 28

NEW YORK STOCK EXCHANGE COMPOSITE CLOSING PRICES

Continued on Page 28

Some figures are unofficial. Yearly highs and lows reflect the 52 weeks plus the current week, but not the latest day. Where a split or stock dividend amounting to 25% or more has been paid, the year's high-low range and yield are shown for the new stock only. Unless otherwise stated, rates of dividends are annual disbursements based on last declaration.

est declaration.
dividend also extra(s). **b**-annual rate of dividend plus dividend, **c**-liquidating dividend **cl**-called, **d**-new yearly dividend declared or paid in preceding 12 months **g**-dividend in Canadian funds, subject to 15% non-residence tax, **l**-declared after split-up or stock dividend, **rd**-dividend this year, omitted, deferred, or no action taken at latest date meeting, **k**-dividend declared or paid this year, an accumulation issue with dividends in arrears, **n**-new issue in the weeks. The high-low range begins with the start of trading next day delivery, **P/E**-price-earnings ratio, **r**-dividend yield or paid in preceding 12 months, plus stock dividend, **s**-split. Dividends begins with date of split, **s/c**-shares, **t**-paid in stock in preceding 12 months, estimated cash ex-dividend or ex-distribution date, **u**-new yearly high, **v**-halved, **w**-in bankruptcy or receivership or being restructured under the Bankruptcy Act, or securities assumed by companies, **wd**-when distributed, **wr**-when issued with warrants, **x**-ex-dividend or ex-rights, **xdis**-ex-distribution without warrants, **y**-ex-dividend and sales in full, **yld**-yield, **z**-full.

WORLD STOCK MARKETS

LONDON DEALING

Reform talks search for a rule book

THE LONDON Stock Exchange ruling council will today discuss the type of dealing which will be allowed under the new rules aimed at liberalising trading in overseas securities, writes John Moore in London.

This attempt to clarify the rules for dealing in overseas securities marks the first stage in a programme of reform at the stock exchange.

In an agreement with the Conservative Government last summer the stock exchange agreed to dismantle its rules setting minimum scales of commission by the end of 1986 and admit outsiders to its regulatory bodies. In return, the Government agreed to exempt the stock

exchange from the effects of restrictive practices legislation.

As a first stage in the dismantling of minimum commissions, the stock exchange council has decided to introduce negotiated rates of commission on overseas securities.

In a series of changes on dealings in overseas securities, the stock exchange council has said that member firms of the exchange will be permitted to form subsidiary companies called "international dealers." Outside firms will be able to hold equity in the international dealing subsidiary, providing that the member firm holds more than 50 per cent of the equity.

Consortiums of broking firms and jobbing firms together may control an international dealership.

Following amendments to last December's rules, the stock exchange is clarifying the form of trading that may take place in overseas securities.

• Bisgood Bishop, the stockjobber or market maker, has held talks with a number of parties with a view to forming a commercial link. No deal has yet been finalised and the firm said yesterday that it was considering "a number of alternatives."

EUROPE

Continued from Page 25

Paris, with advances outnumbering declines two to one, Elf-Aquitaine added FFr 8 to FF 210 but Moët-Hennessy slipped FF 22 to FF 1,400 as each provided trading results and forecasts. Peugeot strengthened FF 14 to FF 257.

The focus of a steady Brussels day came after the close, when Petrofina announced improved profits and dividend along with a one-for-10 scrip. Ahead of this it put on BF 20 to BF 6,900, while movements elsewhere in the market included a BF 130 gain for UCB in chemicals at BF 5,450 and a BF 70 dip by Vieille Montagne to BF 4,360.

A healthy earnings trend among Stockholm banks brought gains of SKr 4 for Handelsbanken at SKr 226 and SKr 3 in SE-Banken at SKr 329 as the bourse had another strong and active day.

Voval stood out with a rise of SKr 10 to SKr 480 on last week's results, and Pharmacia reversed setbacks of recent days to rally SKr 6 at SKr 316.

Copenhagen suffered from the Danish parliamentary impasse, but Oslo held steady.

CANADA

(Closing Prices)

Jan. 30 Ver.

Denmark

Jan. 30

Price + or

Kr. Km. -

Jan. 30

Price + or

Netherlands

Jan. 30

Price + or

Australia

Jan. 30

Price + or

Jan. 30

Price + or

Japan (continued)

Jan. 30

Price + or

Jan. 30

LONDON STOCK EXCHANGE

MARKET REPORT

Equity leaders become unsettled late but session featured by speculative activity

Account Dealing Dates

Option First Declara. Last Account

Dealings from Dealings Day Jan 18 Feb 12 Mar 5

Jan 19 Feb 19 Mar 19

Feb 13 Feb 23 Mar 5

"New-times" dealings may take place from 9.30 am two business days earlier.

A modest expansion in speculative activity highlighted yesterday's first session of a new financial year, trading in London equity markets. Leading shares were pushed to the sidelines and late in the day became suddenly nervous. This weakness relegated the importance of the other market's special issues issues, while the market included many old chestnuts but included a few new names.

Reflecting the lack of institutional enterprise, top-name shares were unable to maintain an early extension of Friday's after-hours' strength. During the morning, the FT Industrial Ordinaries Index moved slightly above its record closing level of 840.5, but it eased back as the trend became more irregular.

Blue chip industrials which had recently attracted above-average support began to look tired, although little selling developed. Hawker Siddeley encountered fresh American demand and stepped up the pace of its higher initially.

Industries responded to UK institutional buying and P & O Deferred benefited from revived hope that the Monopolies Commission would soon give clearance to the Trafalgar House offer.

GEC, however, were unsettled throughout the session by thoughts that the Government White Paper on Defence could be announced ahead of schedule.

The Electrical sector's weakness was in fact one of the principal factors leading to a nervous after-hours' trade in equities, a whole and the 30-share index, only fractionally easier at 3 pm, closed a net 7.3 down at 632.2.

Disappointment with Wall Street's decision to seek re-election also undermined sentiment.

Gilt-edged securities traded quietly but moved higher in line with LIFFE market indications.

Longer-dated stocks gained 3 in places and the Government broker ran out of supplies of the recently created £100m tranche of Treasury 9% per cent 1989s at 94.7, he remained open for bids for stock Treasury 9% per cent 1992/96, tranches of which were also made available to the market on January 24.

Phoenix down late

A rising market of late on talk of a bid from Allianz.

Phoenix fell sharply after-hours from an enhanced 435p to close 15 down on balance at 413p following reports that Allianz had acquired the insurance business of U.S. steel products concern, Armcro; Allianz closed 11 points lower at 220. Among other Composite Insurers, Rencor confirmed 10 to 835p after comment on the group's dividend potential, while GRE closed 7

better at 840p. In Lloyds Brokers, Hegg Robinson, recently favoured on U.S. bid speculation, rose 7 more to 160p in response to an investment recommendation. Stewart Wrightson gained 11 to 335p and Sedgwick put on 3 to 235p.

Merchant banks were highlighted by a fresh flurry of speculative activity in Minister Assets; as bid hopes strengthened the shares touched 139p before closing 10 up on balance at 134p. Purchases featured United Leasing, 12 up at 237p in a thin market.

Financial advertising agency Valla Polen International staged a highly successful debut in the United Securities Market; placed at 110p, the shares opened 140p and closed 160p to 166p before closing at 163p.

Press suggestion that any further bid from Harms Trust would be close to the current market price induced a bout of profit-taking in London Brick, which reacted to 153p before picking up again to close just 2 cheaper on balance at 161p.

London brick concern, Istock Johnson, put on 5 to 154p on speculation that MRC's desire at 86p was contemplation a bid for the company. Elsewhere in the Building sector, leading Contracting and Construction issues recovered from a cautious start to close on a firm note. Barratt Developments, a friendless market of late, encountered repeated support from Tate and Lyle, 10 up to 260p. The shares closed 10 to 170p.

Interest in ICI remained at a low ebb and the close was a net 4 off at 630p. Among other Chemicals, Amersham International, 10 up to 250p following a bid from Quilter Goodison. Credit International drew fresh support on takeover hopes and added 3 to 168p; the Deferred put on 5 to 165p.

Speculative activity in House of Fraser was quickly resumed following as weekend Press suggestion that a U.S. consortium would soon announce bid terms worth around 350p per share for the group; the shares, up 28 last week, rose 6 more to 264p, after 266p. The market also continued strongly and closed 10 up to 151p with buyers anticipating that the group could be tempted to realise the substantial profit on its near 30 per cent stake in Fraser. Loup paid an average of 180p per share for the holding.

Elsewhere, Melline extended Friday's speculative gain of 6 with a fresh advance of 12 to 72p, while Ablestone advanced 7 to 121p. WVV, 10 up to 100p and Heelant gained 7 to 50p.

Leading Electricals encountered some fairly persistent sell-

down 10 more at 180p, continued to reflect the interim profits set-back.

Rumours that the group would unveil a rights issue with its pre-emptive rights were finally settled S. & W. Boustead, 10 up to 222p, while GEC fell 9 to 182p ex. In contrast, Dreamland Electrical performed with a rise of 10 to 29p, after 32p, on news that Valla Polen had acquired 29.5 per cent stake in the company. Vickers and Press mention stimulated demand for Automated Security, 13 higher at 210p, and Acorn Crystallite, still awaiting news of the proposed sale of its fine china interests, advanced 9 to 227p. Multitone fell 10 to 110p, following a switch to Press recommendation; the latter were a couple of pence harder at 210p.

With the exception of Hawker,

8 up at 414p, after 424p, on a

revival of U.S. demand, leading Engineers 9 lower to 203p and TI 8 up to 198p. Elsewhere, Bullough responded to P. & O. recommendation with a rise of 20 to 305p ex. Neepsend, 10 up to 265p, and Newland, a like amount 10 up to 151p with buyers anticipating that the group could be tempted to realise the substantial profit on its near 30 per cent stake in Fraser. Loup paid an average of 180p per share for the holding.

Elsewhere, Melline extended

Friday's speculative gain of 6 with a fresh advance of 12 to 72p, while Ablestone advanced 7 to 121p. WVV, 10 up to 100p and Heelant gained 7 to 50p.

Leading Electricals encountered

some fairly persistent sell-

down 10 more at 180p, continued to reflect the interim profits set-back.

Rumours that the group would

unveil a rights issue with its

pre-emptive rights were finally

settled S. & W. Boustead, 10 up to 222p, while GEC fell 9 to 182p ex. In contrast, Dreamland Electrical performed with a rise of 10 to 29p, after 32p, on news that Valla Polen had acquired 29.5 per cent stake in the company. Vickers and Press mention stimulated demand for Automated Security, 13 higher at 210p, and Acorn Crystallite, still awaiting news of the proposed sale of its fine china interests, advanced 9 to 227p. Multitone fell 10 to 110p, following a switch to P. & O. recommendation; the latter were a couple of pence harder at 210p.

With the exception of Hawker,

8 up at 414p, after 424p, on a

revival of U.S. demand, leading Engineers 9 lower to 203p and TI 8 up to 198p. Elsewhere, Bullough responded to P. & O. recommendation with a rise of 20 to 305p ex. Neepsend, 10 up to 265p, and Newland, a like amount 10 up to 151p with buyers anticipating that the group could be tempted to realise the substantial profit on its near 30 per cent stake in Fraser. Loup paid an average of 180p per share for the holding.

Elsewhere, Melline extended

Friday's speculative gain of 6 with a fresh advance of 12 to 72p, while Ablestone advanced 7 to 121p. WVV, 10 up to 100p and Heelant gained 7 to 50p.

Leading Electricals encountered

some fairly persistent sell-

down 10 more at 180p, continued to reflect the interim profits set-back.

Rumours that the group would

unveil a rights issue with its

pre-emptive rights were finally

settled S. & W. Boustead, 10 up to 222p, while GEC fell 9 to 182p ex. In contrast, Dreamland Electrical performed with a rise of 10 to 29p, after 32p, on news that Valla Polen had acquired 29.5 per cent stake in the company. Vickers and Press mention stimulated demand for Automated Security, 13 higher at 210p, and Acorn Crystallite, still awaiting news of the proposed sale of its fine china interests, advanced 9 to 227p. Multitone fell 10 to 110p, following a switch to P. & O. recommendation; the latter were a couple of pence harder at 210p.

With the exception of Hawker,

8 up at 414p, after 424p, on a

revival of U.S. demand, leading Engineers 9 lower to 203p and TI 8 up to 198p. Elsewhere, Bullough responded to P. & O. recommendation with a rise of 20 to 305p ex. Neepsend, 10 up to 265p, and Newland, a like amount 10 up to 151p with buyers anticipating that the group could be tempted to realise the substantial profit on its near 30 per cent stake in Fraser. Loup paid an average of 180p per share for the holding.

Elsewhere, Melline extended

Friday's speculative gain of 6 with a fresh advance of 12 to 72p, while Ablestone advanced 7 to 121p. WVV, 10 up to 100p and Heelant gained 7 to 50p.

Leading Electricals encountered

some fairly persistent sell-

down 10 more at 180p, continued to reflect the interim profits set-back.

Rumours that the group would

unveil a rights issue with its

pre-emptive rights were finally

settled S. & W. Boustead, 10 up to 222p, while GEC fell 9 to 182p ex. In contrast, Dreamland Electrical performed with a rise of 10 to 29p, after 32p, on news that Valla Polen had acquired 29.5 per cent stake in the company. Vickers and Press mention stimulated demand for Automated Security, 13 higher at 210p, and Acorn Crystallite, still awaiting news of the proposed sale of its fine china interests, advanced 9 to 227p. Multitone fell 10 to 110p, following a switch to P. & O. recommendation; the latter were a couple of pence harder at 210p.

With the exception of Hawker,

8 up at 414p, after 424p, on a

revival of U.S. demand, leading Engineers 9 lower to 203p and TI 8 up to 198p. Elsewhere, Bullough responded to P. & O. recommendation with a rise of 20 to 305p ex. Neepsend, 10 up to 265p, and Newland, a like amount 10 up to 151p with buyers anticipating that the group could be tempted to realise the substantial profit on its near 30 per cent stake in Fraser. Loup paid an average of 180p per share for the holding.

Elsewhere, Melline extended

Friday's speculative gain of 6 with a fresh advance of 12 to 72p, while Ablestone advanced 7 to 121p. WVV, 10 up to 100p and Heelant gained 7 to 50p.

Leading Electricals encountered

some fairly persistent sell-

down 10 more at 180p, continued to reflect the interim profits set-back.

Rumours that the group would

unveil a rights issue with its

pre-emptive rights were finally

settled S. & W. Boustead, 10 up to 222p, while GEC fell 9 to 182p ex. In contrast, Dreamland Electrical performed with a rise of 10 to 29p, after 32p, on news that Valla Polen had acquired 29.5 per cent stake in the company. Vickers and Press mention stimulated demand for Automated Security, 13 higher at 210p, and Acorn Crystallite, still awaiting news of the proposed sale of its fine china interests, advanced 9 to 227p. Multitone fell 10 to 110p, following a switch to P. & O. recommendation; the latter were a couple of pence harder at 210p.

With the exception of Hawker,

8 up at 414p, after 424p, on a

revival of U.S. demand, leading Engineers 9 lower to 203p and TI 8 up to 198p. Elsewhere, Bullough responded to P. & O. recommendation with a rise of 20 to 305p ex. Neepsend, 10 up to 265p, and Newland, a like amount 10 up to 151p with buyers anticipating that the group could be tempted to realise the substantial profit on its near 30 per cent stake in Fraser. Loup paid an average of 180p per share for the holding.

Elsewhere, Melline extended

Friday's speculative gain of 6 with a fresh advance of 12 to 72p, while Ablestone advanced 7 to 121p. WVV, 10 up to 100p and Heelant gained 7 to 50p.

Leading Electricals encountered

some fairly persistent sell-

down 10 more at 180p, continued to reflect the interim profits set-back.

Rumours that the group would

unveil a rights issue with its

pre-emptive rights were finally

settled S. & W. Boustead, 10 up to 222p, while GEC fell 9 to 182p ex. In contrast, Dreamland Electrical performed with a rise of 10 to 29p, after 32p, on news that Valla Polen had acquired 29.5 per cent stake in the company. Vickers and Press mention stimulated demand for Automated Security, 13 higher at 210p, and Acorn Crystallite, still awaiting news of the proposed sale of its fine china interests, advanced 9 to 227p. Multitone fell 10 to 110p, following a switch to P. & O. recommendation; the latter were a couple of pence harder at 210p.

With the exception of Hawker,

8 up at 414p, after 424p, on a

revival of U.S. demand, leading Engineers 9 lower to 203p and TI 8 up to 198p. Elsewhere, Bullough responded to P. & O. recommendation with a rise of 20 to 305p ex. Neepsend, 10 up to 265p, and Newland, a like amount 10 up to 151p with buyers anticipating that the group could be tempted to realise the substantial profit on its near 30 per cent stake in Fraser. Loup paid an average of 180p per share for the holding.

Elsewhere, Melline extended

Friday's speculative gain of 6 with a fresh advance of 12 to 72p, while Ablestone advanced 7 to 121p. WVV, 10 up to 100p and Heelant gained 7 to 50p.

Leading Electricals encountered

some fairly persistent sell-

down 10 more at 180p, continued to reflect the interim profits set-back.

Rumours that the group would

unveil a rights issue with its

pre-emptive rights were finally

settled S. & W. Boustead, 10 up to 222p, while GEC fell 9 to 182p ex. In contrast, Dreamland Electrical performed with a rise of 10 to 29p, after 32p, on news that Valla Polen had acquired 29.5 per cent stake in the company. Vickers and Press mention stimulated demand for Automated Security, 13 higher at 210p, and Acorn Crystallite, still awaiting news of the proposed sale of its fine china interests, advanced 9 to 227p. Multitone fell 10 to 110p, following a switch to P. & O. recommendation; the latter were a couple of pence harder at 210p.

With the exception of Hawker,

8 up at 414p, after 424p, on a

revival of U.S. demand, leading Engineers 9 lower to 203p and TI 8 up to 198p. Elsewhere, Bullough responded to P. & O. recommendation with a rise of 20 to 305p ex. Neepsend, 10 up to 265p, and Newland, a like amount 10 up to 151p with buyers anticipating that the group could be tempted to realise the substantial profit on its near 30 per cent stake in Fraser. Loup paid an average of 180p per share for the holding.

Elsewhere, Melline extended

Friday's speculative gain of 6 with a fresh advance of 12 to 72p, while Ablestone advanced 7 to 121p. WVV, 10 up to 100p and Heelant gained 7 to 50p.

Leading Electricals encountered

some fairly persistent sell-

down 10 more at 180p, continued to reflect the interim profits set-back.

Financial Times Tuesday January 31 1964

INDUSTRIALS—Continued

Year	Low	High	No.	Price	Yd	PE
1963-64	1.0	2.2	29224	204.47	1.8	9.0
21	27	31	2025	1.5	—	—
22	16	21	106	48.47	1.5	—
23	16	21	107	48.47	1.5	—
24	16	21	108	48.47	1.5	—
25	16	21	109	48.47	1.5	—
26	16	21	110	48.47	1.5	—
27	16	21	111	48.47	1.5	—
28	16	21	112	48.47	1.5	—
29	16	21	113	48.47	1.5	—
30	16	21	114	48.47	1.5	—
31	16	21	115	48.47	1.5	—
32	16	21	116	48.47	1.5	—
33	16	21	117	48.47	1.5	—
34	16	21	118	48.47	1.5	—
35	16	21	119	48.47	1.5	—
36	16	21	120	48.47	1.5	—
37	16	21	121	48.47	1.5	—
38	16	21	122	48.47	1.5	—
39	16	21	123	48.47	1.5	—
40	16	21	124	48.47	1.5	—
41	16	21	125	48.47	1.5	—
42	16	21	126	48.47	1.5	—
43	16	21	127	48.47	1.5	—
44	16	21	128	48.47	1.5	—
45	16	21	129	48.47	1.5	—
46	16	21	130	48.47	1.5	—
47	16	21	131	48.47	1.5	—
48	16	21	132	48.47	1.5	—
49	16	21	133	48.47	1.5	—
50	16	21	134	48.47	1.5	—
51	16	21	135	48.47	1.5	—
52	16	21	136	48.47	1.5	—
53	16	21	137	48.47	1.5	—
54	16	21	138	48.47	1.5	—
55	16	21	139	48.47	1.5	—
56	16	21	140	48.47	1.5	—
57	16	21	141	48.47	1.5	—
58	16	21	142	48.47	1.5	—
59	16	21	143	48.47	1.5	—
60	16	21	144	48.47	1.5	—
61	16	21	145	48.47	1.5	—
62	16	21	146	48.47	1.5	—
63	16	21	147	48.47	1.5	—
64	16	21	148	48.47	1.5	—
65	16	21	149	48.47	1.5	—
66	16	21	150	48.47	1.5	—
67	16	21	151	48.47	1.5	—
68	16	21	152	48.47	1.5	—
69	16	21	153	48.47	1.5	—
70	16	21	154	48.47	1.5	—
71	16	21	155	48.47	1.5	—
72	16	21	156	48.47	1.5	—
73	16	21	157	48.47	1.5	—
74	16	21	158	48.47	1.5	—
75	16	21	159	48.47	1.5	—
76	16	21	160	48.47	1.5	—
77	16	21	161	48.47	1.5	—
78	16	21	162	48.47	1.5	—
79	16	21	163	48.47	1.5	—
80	16	21	164	48.47	1.5	—
81	16	21	165	48.47	1.5	—
82	16	21	166	48.47	1.5	—
83	16	21	167	48.47	1.5	—
84	16	21	168	48.47	1.5	—
85	16	21	169	48.47	1.5	—
86	16	21	170	48.47	1.5	—
87	16	21	171	48.47	1.5	—
88	16	21	172	48.47	1.5	—
89	16	21	173	48.47	1.5	—
90	16	21	174	48.47	1.5	—
91	16	21	175	48.47	1.5	—
92	16	21	176	48.47	1.5	—
93	16	21	177	48.47	1.5	—
94	16	21	178	48.47	1.5	—
95	16	21	179	48.47	1.5	—
96	16	21	180	48.47	1.5	—
97	16	21	181	48.47	1.5	—
98	16	21	182	48.47	1.5	—
99	16	21	183	48.47	1.5	—
100	16	21	184	48.47	1.5	—
101	16	21	185	48.47	1.5	—
102	16	21	186	48.47	1.5	—
103	16	21	187	48.47	1.5	—
104	16	21	188	48.47	1.5	—
105	16	21	189	48.47	1.5	—
106	16	21	190	48.47	1.5	—
107	16	21	191	48.47	1.5	—
108	16	21	192	48.47	1.5	—
109	16	21	193	48.47	1.5	—
110	16	21	194	48.47	1.5	—
111	16	21	195	48.47	1.5	—
112	16	21	196	48.47	1.5	—
113	16	21	197	48.47	1.5	—
114	16	21	198	48.47	1.5	—
115	16	21	199	48.47	1.5	—
116	16	21	200	48.47	1.5	—
117	16	21	201	48.47	1.5	—
118	16	21	202	48.47	1.5	—
119	16	21	203	48.47	1.5	—
120	16	21	204	48.47	1.5	—
121	16	21	205	48.47	1.5	—
122	16	21	206	48.47	1.5	—
123	16	21	207	48.47	1.5	—
124	16	21	208	48.47	1.5	—
125	16	21	209	48.47	1.5	—
126	16	21	210	48.47	1.5	—
127	16	21	211	48.47	1.5	—
128	16	21	212	48.47	1.5	—
129	16	21	213	48.47	1.5	—
130	16	21	214	48.47	1.5	—
131	16	21	215	48.47	1.5	—
132	16	21	216	48.47	1.5	—
133	16	21	217	48.47	1.5	—
134	16	21	218	48.47	1.5	—
135	16	21	219	48.47	1.5	—
136	16	21	220	48.47	1.5	—
137	16	21	221	48.47	1.5	—
138	16	21	222	48.47	1.5	—
139	16	21	223	48.47	1.5	—
140	16	21	224	48.47	1.5	—
141	16	21	225	48.47	1.5	—
142	16	21	226	48.47	1.5	—
143	16	21	227	48.47	1.5	—
144	16	21	228	48.47	1.5	—
145	16	21	229	48.47	1.5	—
146	16	21	230	48.47	1.5	—
147	16	21	231	48.47	1.5	—
148	16	21				

INSURANCE & OVERSEAS MANAGED FUNDS

طُكْزَا صَنْ الْوَهْبِ

CURRENCIES, MONEY and CAPITAL MARKETS

FOREIGN EXCHANGES

Dollar weak in thin trade

The dollar lost ground on the foreign exchanges yesterday, touching its lows with the opening of the New York market, but finishing the day slightly higher. A fall of \$0.78m in U.S. M1 money supply announced last Friday was the main factor behind the dollar's decline, but at the same time the downward drift was limited by the better-than-expected December figures also published Friday, and the decision of President Reagan to seek another term of office.

Trading was very thin however, particularly before U.S. traders entered the market, but the dollar's trend this week may be influenced by two figures of U.S. leading indicators, which are expected to show only a small rise in the region of 0.3 per cent. Other significant events are the present meeting of the Federal Open Market Committee to set monetary policy for the month, the outcome of the U.S. Treasury refunding package for February, and Friday's unemployment figures.

In very quiet trade the dollar fell to DM 2.8100 from 2.8230 against the D-mark; FFr 8.5875 from FF 8.6250 against the French franc; and SwFr 2.2410 from SwFr 2.2475 in terms of the Swiss franc, but rose slightly

to Y234.55 from Y234.25 against the Japanese yen.

STERLING — Trading range against the dollar in 1983-84 is £1.6245 to £1.6385. December average 1.6345. Trading range against the dollar in 1982-83 is £2.8425 to £2.8230. December average 2.7487. Trade weighted index 123.4 against 125.7 six months ago.

The pound was on the sidelines, moving within a narrow range, and is unlikely to be influenced by either of the major statistics due for publication this week. These are U.S. official figures on unemployment figures on Thursday. Sterling opened at £1.4055-1.4065, and after moving between £1.4045 and £1.4095, closed at £1.4075, a rise of 45 points on the day. The pound eased slightly to DM 3.9625 from DM 3.9625, but was unchanged at FFr 12.1025, and SwFr 3.1575, and rose to 80.60-80.80 from 80.50-80.90.

Denmark 14.31-14.34; Ireland 1.2700-1.2820; W. Ger. 1.2800-1.2820; Portugal 1.0050-1.0055; Spain 2.2050-2.2055; Italy 2.405-2.414; Norway 1.1100-1.1105; France 1.0700-1.0712; 12.05-12.10; 11.49-11.53; Japan 320-331; Austria 2.20-2.21; 2.15-2.17; 11.45-11.48; 10.70-10.73; 5.70-5.74; 1.17-1.17.

Belgian rate is for convertible francs. Financial franc 82.35-82.45. Six-month forward dollar 0.25-0.30c. Dis. 12-month 0.65-0.75c. Dis.

Changes are for ECU, therefore positive change denotes a weak currency. Adjustment calculated by Financial Times.

THE POUND SPOT AND FORWARD

Jan 30	Day's spread	Closes	One month	% p.a.	Three months	% p.a.	Jan 30	Day's spread	Closes	One month	% p.a.	Three months	% p.a.
U.S. 1.6065-1.6095	1.4075-1.4085	0.63-0.65	-0.47	0.13-0.15	0.485	-0.55	UK 1.4045-1.4065	1.4075-1.4085	0.63-0.65	-0.47	0.13-0.15	0.485	-0.55
Canada 1.7620-1.7550	1.7570-1.7580	0.05-0.15	-0.48	0.15-0.18	0.562	-0.58	Ireland 1.0980-1.1020	1.0950-1.1020	0.50-0.52	-0.48	0.15-0.18	0.562	-0.58
Netherlands 1.0600-1.0610	1.0600-1.0610	1.00-1.05	-0.48	0.15-0.18	0.562	-0.58	Canada 1.2470-1.2485	1.2480-1.2485	0.50-0.52	-0.48	0.15-0.18	0.562	-0.58
Belgium 80.60-80.80	80.60-80.80	0.05-0.15	-0.48	0.15-0.18	0.562	-0.58	Netherlands 3.1630-3.1710	3.1630-3.1710	0.50-0.52	-0.48	0.15-0.18	0.562	-0.58
Denmark 14.31-14.34	14.33-14.34	2.30-2.35	-0.48	0.15-0.18	0.562	-0.58	Denmark 10.16-10.21	10.15-10.19	0.50-0.52	-0.48	0.15-0.18	0.562	-0.58
Ireland 1.2700-1.2820	1.2700-1.2820	0.20-0.25	-0.48	0.15-0.18	0.562	-0.58	Portugal 138.50-137.55	138.50-137.55	1.00-1.05	-0.48	0.15-0.18	0.562	-0.58
W. Ger. 1.2800-1.2820	1.2800-1.2820	0.10-0.15	-0.48	0.15-0.18	0.562	-0.58	W. Ger. 2.8065-2.8155	2.8065-2.8155	0.70-0.75	-0.48	0.15-0.18	0.562	-0.58
Portugal 100.50-100.55	102.50-102.55	0.20-0.25	-0.48	0.15-0.18	0.562	-0.58	Portugal 1.7120-1.7130	1.7120-1.7130	0.70-0.75	-0.48	0.15-0.18	0.562	-0.58
Spain 222.75-223.75	222.75-223.75	0.10-0.15	-0.48	0.15-0.18	0.562	-0.58	Norway 7.8500-7.8785	7.8600-7.8850	2.20-2.30	-0.48	0.15-0.18	0.562	-0.58
Italy 2.405-2.414	2.410-2.412	1.30-1.35	-0.48	0.15-0.18	0.562	-0.58	France 8.2000-8.2050	8.2000-8.2050	1.00-1.05	-0.48	0.15-0.18	0.562	-0.58
Norway 11.00-11.05	11.00-11.05	0.10-0.15	-0.48	0.15-0.18	0.562	-0.58	Japan 234.00-234.65	234.00-234.65	0.50-0.55	-0.48	0.15-0.18	0.562	-0.58
France 12.05-12.10	12.05-12.10	0.10-0.15	-0.48	0.15-0.18	0.562	-0.58	Austria 19.80-19.88	19.80-19.88	0.50-0.55	-0.48	0.15-0.18	0.562	-0.58
Japan 11.49-11.53	11.51-11.52	0.10-0.15	-0.48	0.15-0.18	0.562	-0.58	Austria 5.40-5.45	5.40-5.45	0.50-0.55	-0.48	0.15-0.18	0.562	-0.58
Austria 2.20-2.21	2.20-2.21	0.10-0.15	-0.48	0.15-0.18	0.562	-0.58	Switz. 2.2095-2.2465	2.2095-2.2465	0.10-0.15	-0.48	0.15-0.18	0.562	-0.58
Switz. 3.14-3.17	3.15-3.17	0.10-0.15	-0.48	0.15-0.18	0.562	-0.58	Switz. 3.14-3.17	3.15-3.17	0.10-0.15	-0.48	0.15-0.18	0.562	-0.58

Belgian rate is for convertible francs. Financial franc 82.35-82.45. Six-month forward dollar 0.25-0.30c. Dis. 12-month 0.65-0.75c. Dis.

THE DOLLAR SPOT AND FORWARD

THE DOLLAR SPOT AND FORWARD

Jan 30	Day's spread	Closes	One month	% p.a.	Three months	% p.a.	Jan 30	Day's spread	Closes	One month	% p.a.	Three months	% p.a.
U.S. 1.6065-1.6095	1.4075-1.4085	0.63-0.65	-0.47	0.13-0.15	0.485	-0.55	UK 1.4045-1.4065	1.4075-1.4085	0.63-0.65	-0.47	0.13-0.15	0.485	-0.55
Canada 1.7620-1.7550	1.7570-1.7580	0.05-0.15	-0.48	0.15-0.18	0.562	-0.58	Ireland 1.0980-1.1020	1.0950-1.1020	0.50-0.52	-0.48	0.15-0.18	0.562	-0.58
Netherlands 1.0600-1.0610	1.0600-1.0610	1.00-1.05	-0.48	0.15-0.18	0.562	-0.58	Canada 1.2470-1.2485	1.2480-1.2485	0.50-0.52	-0.48	0.15-0.18	0.562	-0.58
Belgium 80.60-80.80	80.60-80.80	0.05-0.15	-0.48	0.15-0.18	0.562	-0.58	Netherlands 3.1630-3.1710	3.1630-3.1710	0.50-0.52	-0.48	0.15-0.18	0.562	-0.58
Denmark 14.31-14.34	14.33-14.34	2.30-2.35	-0.48	0.15-0.18	0.562	-0.58	Denmark 10.16-10.21	10.15-10.19	0.50-0.52	-0.48	0.15-0.18	0.562	-0.58
Ireland 1.2700-1.2820	1.2700-1.2820	0.20-0.25	-0.48	0.15-0.18	0.562	-0.58	Portugal 138.50-137.55	138.50-137.55	1.00-1.05	-0.48	0.15-0.18	0.562	-0.58
W. Ger. 1.2800-1.2820	1.2800-1.2820	0.10-0.15	-0.48	0.15-0.18	0.562	-0.58	W. Ger. 2.8065-2.8155	2.8065-2.8155	0.70-0.75	-0.48	0.15-0.18	0.562	-0.58
Portugal 100.50-100.55	102.50-102.55	0.20-0.25	-0.48	0.15-0.18	0.562	-0.58	Portugal 1.7120-1.7130	1.7120-1.7130	0.70-0.75	-0.48	0.15-0.18	0.562	-0.58
Spain 222.75-223.75	222.75-223.75	0.10-0.15	-0.48	0.15-0.18	0.562	-0.58	Norway 7.8500-7.8785	7.8600-7.8850	2.20-2.30	-0.48	0.15-0.18	0.562	-0.58
Italy 2.405-2.414	2.410-2.412	1.30-1.35	-0.48	0.15-0.18	0.562	-0.58	France 8.2000-8.2050	8.2000-8.2050	1.00-1.05	-0.48	0.15-0.18	0.562	-0.58
Norway 11.00-11.05	11.00-11.05	0.10-0.15	-0.48	0.15-0.18	0.562	-0.58	Japan 234.00-234.65	234.00-234.65	0.50-0.55	-0.48	0.15-0.18	0.562	-0.58
France 12.05-12.10	12.05-12.10	0.10-0.15	-0.48	0.15-0.18	0.562	-0.58	Austria 19.80-19.88	19.80-19.88	0.50-0.55	-0.48	0.15-0.18	0.562	-0.58
Japan 11.49-11.53	11.51-11.52	0.10-0.15	-0.48	0.15-0.18	0.562	-0.58	Austria 5.40-5.45	5.40-5.45	0.50-0.55	-0.48	0.15-0.18	0.562	-0.58
Austria 2.20-2.21	2.20-2.21	0.10-0.15	-0.48	0.15-0.18	0.562	-0.58	Switz. 2.2095-2.2465	2.2095-2.2465	0.10-0.15	-0.48	0.15-0.18	0.562	-0.58
Switz. 3.14-3.17	3.15-3.17	0.10-0.15	-0.48	0.15-0.18	0.562	-0.58	Switz. 3.14-3.17	3.15-3.17	0.10-0.15	-0.48	0.15-0.18	0.562	-0.58

Belgian rate is for convertible francs. Financial franc 82.35-82.45. Six-month forward dollar 0.25-0.30c. Dis. 12-month 0.65-0.75c. Dis.

THE DOLLAR SPOT AND FORWARD

THE DOLLAR SPOT AND FORWARD

THE DOLLAR SPOT AND FORWARD

<p

INTERNATIONAL CAPITAL MARKETS

GOVERNMENT GUARANTEED BONDS TO RAISE Y603BN

Japan to lift foreign borrowing

BY YOKO SHIBATA IN TOKYO

JAPAN has decided to sharply increase the amount of overseas borrowing in the form of government guaranteed bonds by state departments, companies and agencies.

For fiscal 1983, starting from April 1, the Finance Ministry is planning to raise ¥603bn (\$2.6bn) worth of such bonds, almost 50 per cent up on this year's ¥409bn.

Overseas borrowing in the private capital market by governmental bodies has had to increase to make up for the slackening of the growth in funds from domestic sources. For fiscal 1983 the country's investment and loan programme is seen as totalling ¥21,000bn - a rise of only 1.9 per cent over the current year's level.

With the Swiss franc market nearing saturation point from Japan:

new government and corporate issues, the ministry is known to be directing borrowers towards both the Eurodollar and the New York market.

The ministry and the Japan Development Bank are currently preparing to issue US\$100m worth of government guaranteed bonds in help to float a Samuri bond without waiting for six months or more.

The maximum amount of a Samuri bond for the World Bank, Asian Development Bank and Inter-American Development Bank is to be lifted by ¥10bn to ¥30bn. The maximum amount for other AAA borrowers is to be set at ¥20bn.

The new rules were originally planned to come into effect last autumn but were shelved owing to the persistent weakness of the yen against the U.S. dollar. This put

borrowers off the Samuri market for fear of foreign exchange losses at the time of redemption.

The ministry has also been concerned that relaxation of the rules would prompt an outflow of funds from Japan - meaning a further weakening of the yen. In view of the severe criticism of the closed nature of the Japanese capital market, the ministry and the underwriting securities companies have now decided to relax the Samuri bond flotation rules.

In 1983 there were 41 Samuri bond issues worth ¥720bn, up by 8.6 per cent from the ¥663bn in 1982 for 32 issues. Following this relaxing of the rules, the number and value of Samuri bond issues in 1984 are expected to increase considerably.

Active primary market nears \$300m

BY MARY ANN SIEGHART IN LONDON

DESPITE a conspicuous lack of retail interest in the Eurodollar bond secondary market, new issue activity yesterday was strong with nearly \$300m of bonds being launched.

Industrial Bank of Japan launched a \$125m, five-year bond which carries an 11% per cent coupon at par. IBI International is

leading the deal with S.G. Warburg, Morgan Guaranty and Morgan Stanley. Like all recent Japanese bank fixed-rate bonds, the proceeds of the issue will be swapped for floating rate funds. IBI is understood to be receiving this money at a rate substantially under the London interbank offered rate (Libor).

Despite its relatively low coupon, the issue traded within its selling concession, reflecting investors' preference for five-year paper.

Commerzbank's \$100m floating rate note, launched over the weekend, continued to hold up well, just inside its front-end fees of 0.45 per cent.

The five-year issue pays a coupon set at three-month Libor at par and

is led by Commerzbank with Credit Suisse First Boston and Orion Royal Bank. Each \$10,000 bond carries 10 warrants, priced at \$12.50 each, to buy into a five-year, 11% per cent bond at par. The warrants have a 3½-year life and were trading yesterday around their offer price.

Mitsubishi Metal Corporation, meanwhile, is raising \$40m through a five-year bond with an indicated 6 per cent coupon at par. With each \$500 bond is included one warrant to buy \$5,000 worth of the company's equity at a premium of about 2½ per cent over the share price.

Nikko Securities, the lead manager, will price the deal on February 8. Mitsubishi Finance and Morgan Grenfell are co-leaders, the former making its debut as a co-lead manager of a public issue.

Salomon, which is leading and underwriting the deal itself, is issuing a series of tranches, maturing every June and December between June 1984 and the final maturity date in 2008. The last tranche is for \$127.5m each. Salomon has bought \$120m of the original issue,

but the addition of the coupon payments brings the total to \$487.5m.

Hill Samuel, the UK merchant bank, yesterday launched a \$300m FRN which pays 4% per cent over the mean of the six-month London interbank bid and offered rates at par. The 12-year bond is led by Morgan Guaranty and Hill Samuel and traded at a small 0.15 per cent discount from par, well within its 0.60 per cent front-end fees.

Today should see the launch of a \$250m floater from Credit Commercial de France, the French bank. It plans to lead the deal itself and the terms are expected to include a 12-year life and a spread of 4% point over the mean of the 6-month bid and offered rates.

In Germany, Pepsico, always a popular name, launched a very successful, though large, DM 250m deal through Dresdner Bank. The bond has a 10-year life and a 7% per cent coupon at par. It traded at a ¾ point discount, well within its 1% point selling concession.

*This advertisement is issued in compliance with the requirements of the Council of The Stock Exchange.
It does not constitute an invitation to the public to subscribe for or purchase any shares.*

E-SYSTEMS, INC.
*(Incorporated with limited liability under the laws of
the State of Delaware, United States of America)*

Authorised
50,000,000 Common Shares of U.S. \$1.00 par value
**including 3,306,930 shares reserved for issue*

The Council of The Stock Exchange has admitted to the Official List all the shares of common stock of E-Systems, Inc. issued and reserved for issue.

The Company designs, develops and manufactures advanced electronic systems and products, primarily for sale in defence related markets.

Particulars relating to E-Systems, Inc. are available in the Exetel Statistical Service and copies of such particulars may be obtained during usual business hours on any weekday (Saturdays excepted) up to and including 24th February, 1984 from:

Kidder, Peabody International Limited,
99 Bishopsgate,
London EC2M 3UX

31st January, 1984.

Cazenove & Co.,
12 Tokenhouse Yard,
London EC2R 7AN

All these securities have been sold. This announcement appears as a matter of record only.

New Issue

Baxter Technologies Corporation

\$10,000,000 (Cdn.)
4,000,000 Units

Each Unit consists of one Common Share and one Common Share Purchase Warrant (1984).

Price: \$2.50 per Unit

McLeod Young Weir Limited

Midland Doherty Limited	Gardiner, Watson Limited	Lévesque, Beaubien Inc.	Bache Securities Inc.
First Marathon Securities Limited	Odium Brown Limited	Jones Heward & Company Ltd.	Davidson Partners Limited

January 1984

City Investing Company
US \$50,000,000

City Investing Finance N.V.

Guaranteed Floating Rate Notes due 1986

In accordance with the provisions of the Notes, notice is hereby given that the rate of interest for the period from 1st February, 1984 to 1st August, 1984 has been established at 10% per cent, per annum.

The interest payment date will be 1st August, 1984. Payment which will amount to US \$53.08 per Note, will be made against the relative coupon.

Agent Bank
Bank of America International Limited

BARCLAYS International
Barclays Overseas Investment Co. BV

U.S.\$200,000,000

Guaranteed Floating Rate Notes 1995 convertible until January 1988 into 9½ Guaranteed Bonds 1995.

For six months to 31st July 1984 the Notes will carry an interest rate of 10% per annum.

Coupon Values will be:
U.S.\$5,000 Notes U.S.\$259.10
U.S.\$1,000 Notes U.S.\$518.19

The right to convert during this six-month period is not exercisable from 10.7.84-31.7.84 both dates inclusive.

Agent Bank and Principal Paying Agent
BARCLAYS BANK PLC
Securities Services Department
54 Lombard Street London EC3P 3AH

FT INTERNATIONAL BOND SERVICE

The list shows the 200 latest international bond issues for which an adequate secondary market exists. The following are closing prices for January 30.

U.S. DOLLAR STRAIGHTS

Austria Corus 11½% 90 Issued Bid Offer Change on dev week Yield

Austria Corus 11% 95 100 97½ 97½ -½% +½% 11.05

Bank of Tokyo 11% 90 100 95½ 95½ -½% +½% 12.05

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 12.25

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 12.55

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 12.75

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 12.95

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 13.15

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 13.35

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 13.55

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 13.75

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 13.95

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 14.15

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 14.35

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 14.55

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 14.75

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 14.95

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 15.15

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 15.35

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 15.55

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 15.75

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 15.95

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 16.15

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 16.35

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 16.55

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 16.75

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 16.95

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 17.15

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 17.35

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 17.55

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 17.75

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 17.95

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 18.15

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 18.35

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 18.55

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 18.75

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 18.95

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 19.15

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 19.35

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 19.55

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 19.75

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 19.95

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 20.15

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 20.35

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 20.55

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 20.75

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 20.95

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 21.15

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 21.35

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 21.55

Bank of Tokyo 11% 90 100 97½ 97½ -½% +½% 21.75

SECTION IV

FINANCIAL TIMES SURVEY

Tuesday January 31, 1984

DRAX

Power Station

Phase two, costing £1bn, is being built within budget. With phase one, it will provide the biggest coal-fired station in Europe by 1986. The CEBG's tough management has brought results which are widely admired

By NICK GARNETT

THE FIRST generating unit in the fifth second phase of the Drax Power Station construction project was recently synchronised with the national powergrid—a significant demonstration by the Central Electricity Generating Board, the construction industry and its unions that they could build to time, and within budget.

At the third and final unit is completed on schedule in two years' time, they will have secured a build performance for a power station which could not be attained 10 years ago.

The 2,000 Megawatts of the second phase of Drax, whose construction began in 1978, will complement the similar generating capacity of the first phase of Drax, completed 10 years ago, providing the generating board with the biggest coal-fired station in Western Europe.

The second phase of Drax has been built so far to time and cost as a result of a construction programme free of the stoppages, delays and cost overruns which characterised much of power station building and other large project construction in the 1970s.

The basis of this has been a much tougher attitude towards control of the project by the CEBG as client-owner. It has insisted in negotiations on a return to lump sum in place of cost reimbursable contracts, on the introduction of a structure for harmonising pay and

conditions, and on double day are also in use—could be a shift working. On top of this the 1981 national agreement for the mechanical engineering sector has created a new framework within which major developments can take place.

Some engineers say the build performance has been as good as that achieved anywhere in Europe, but it remains to be seen whether this represents a decisive and permanent leap forward in the industry's ability to undertake major projects or, possibly, only the temporary influence exerted by recession on trade union power.

Complicated

It also raises the question whether the factors which have contributed to the performance at Drax can be translated to the construction of the Sizewell B nuclear pressurised water reactor station, the public inquiry into which is now in its second year.

Project management for that power station, if it is given the go-ahead could be a more complicated and controversial issue, and has yet to be agreed by the Government. The generating board and the National Nuclear Corporation, however, have come to an agreement on broad aspects of project management.

The board says many of the features and lessons learnt at Drax and at the Heysham Two nuclear station—where many of the Drax-style control tools

in its ability to shut down much less cost effective capacity.

The thermal efficiency of both parts of Drax together will be about 37.5 per cent which compares with a level of only 29 per cent achieved by some of the old stations. The last three of Drax's six generating units will save around £55m a year in generating costs when compared with the least efficient stations, according to the CEBG.

Prime centre

When completed, the Drax twins will consume 10m tonnes of coal a year, which, at cur-

rent costs, is worth £410m to the National Coal Board. The second phase is also utilising a construction workforce of 3,000, two-thirds of whom live permanently in the Yorkshire-Humber area, Britain's prime centre of power generation accounting for one-fifth of electricity output. The whole of Drax which has a common control room (though the two plants can be run separately) will employ 1,100 to operate it. And, as with all such projects, Drax final phase is a shopwindow for British contractors.

This is now even more the case because the generating

stations has been 70 to 80 months. The final phase of Drax has returned build performance to that being achieved in the 1960s.

The delays and cost overruns which plagued much of power station and other big project construction during the 1970s were due to a lack of management control and a whole series of union-management and inter-union rows. These achieved their most public notoriety during the Isle of Grain lagers' dispute but similar friction has been virtually absent during Drax.

Source

It has, nevertheless, suffered problems. It endured an eight-week strike during foundation works. A change in the source of coal, bringing in supplies with a much greater ash content than was planned for, resulted in late design alterations to hoppers. These and other difficulties caused the project to fall 26 weeks behind schedule at one point but that was clawed back.

Project management has also been assisted by the generating board's decision to duplicate Drax A as far as possible. This could not be fully achieved, partly because of plant measurement changes resulting from metrication and alterations in plant design since Drax A was built.

Project management, control tools and labour relations are

CONTENTS

Managing the project	II
New labour practices	II
The UK's power needs	III
The contractors	III
Using the surplus heat	IV
Uses for coal ash	IV
Acid rain campaign grows	V
Micros take control	V
UK construction programme	VI
Drax successes recognised	VI

Editorial production:
Michael Strutt

Pictures by
Hugh Routledge

Profile: Jack Elston,
project manager VI

the two most important features of Drax construction. The structure devised within the CEBG followed the findings of a business Round Table study into the U.S. construction industry which has also suffered severe problems.

The structure is encapsulated in a report by Mr Denis Lommer, former executive board member. "Will Drax give back to the construction industry its credibility on large projects?"

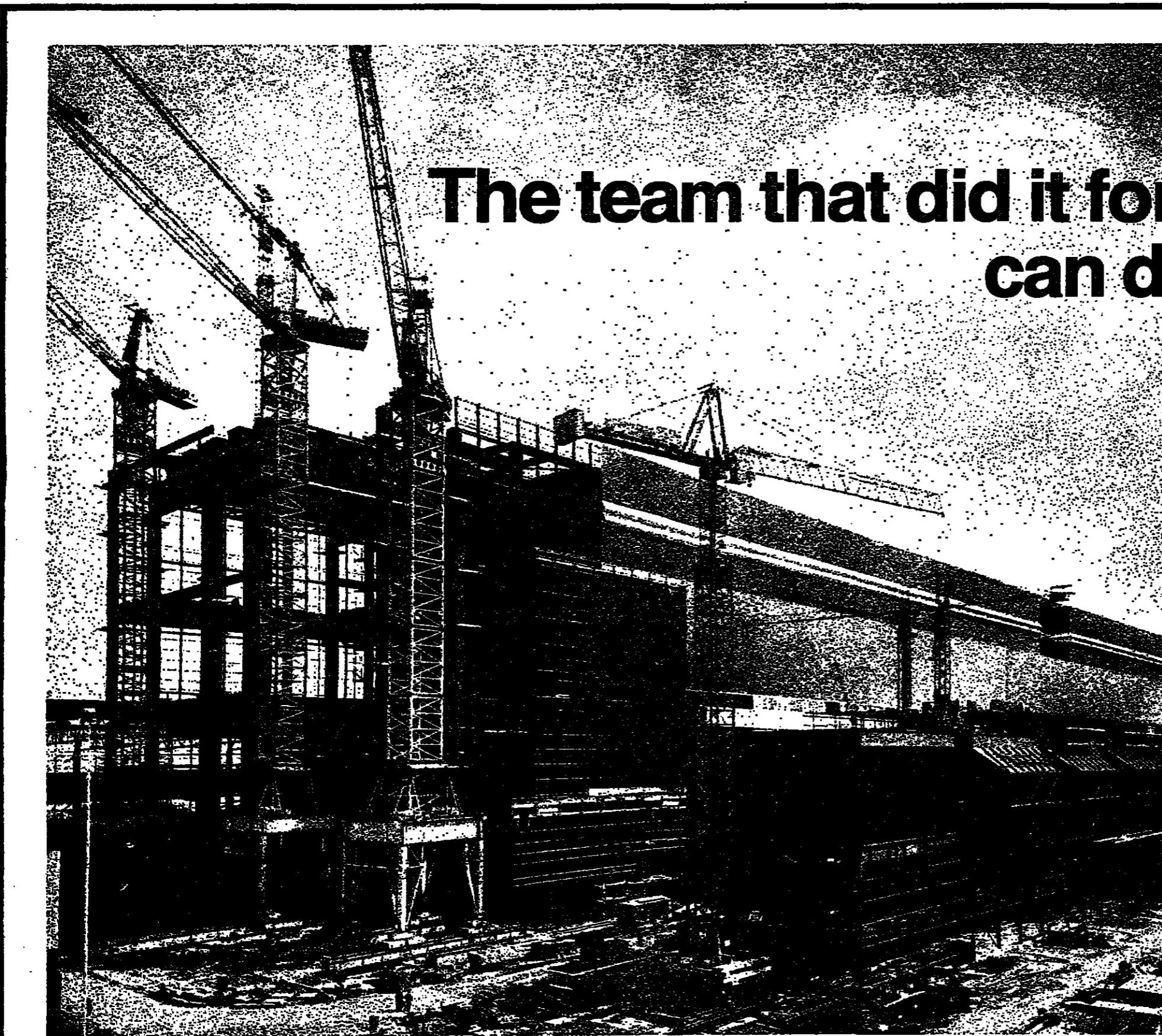
Mr John Elston, general secretary of the construction section of the Amalgamated Union of Engineering Workers, a main backer of the 1981 national agreement for mechanical engineering, has no doubts.

"We've drastically changed the industry around." Others in the trade union movement are more doubtful. Mr George Henderson, national construction secretary of the Transport and General Workers Union, believes that many of the positive changes in the industry will not be permanent.

For the generating board's construction division, Mr John Collier, its director-general, argues that the performance at Drax and Heysham Two will stand the board and the construction industry in good stead when the recession ends. He hopes orderly labour relations will be maintained.



ONE OF THE HUGE COOLING TOWERS NEARS COMPLETION



The team that did it for Drax can do it for you

At 17.20hrs on December 3rd 1983 the first of three 660 megawatt generating units at the Drax Power Station Completion project in North Yorkshire supplied power for the first time to the National Grid.

Today, January 31st 1984—fifty-six months into an eighty month construction programme—the project is on time and within its planned cost.

By the time it is completed in 1986 it will have cost more than £1000 million and together with the first half of the station, completed in 1975, Drax will be capable of supplying a quarter of the electrical needs of the whole of the North East of England.

It will burn 35,000 tonnes of coal every day providing jobs for more than 20,000 miners for the length of its operational life.

Pulling together a job like this calls for a lot of experience. That experience is available on a consultancy basis.

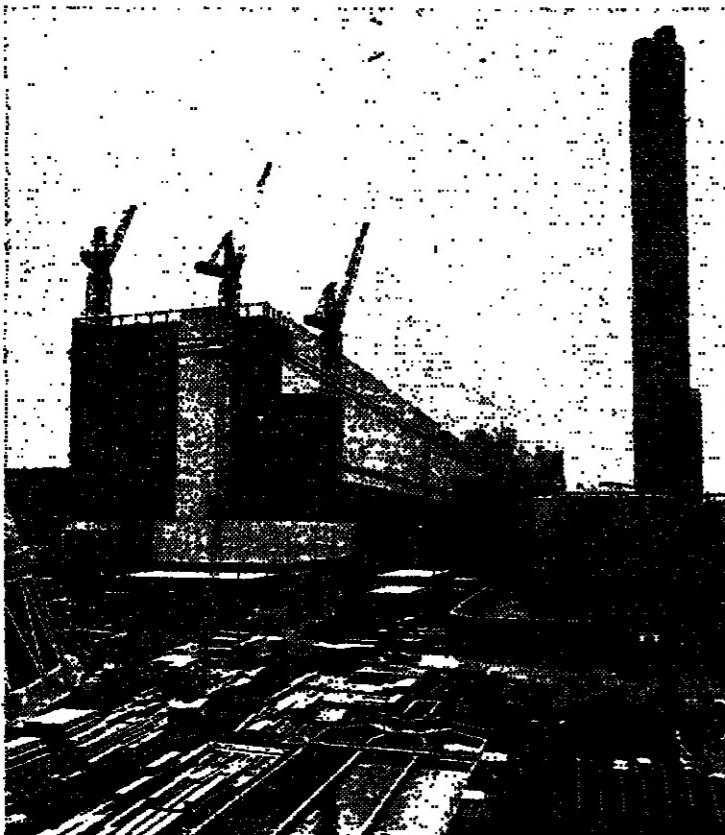
Enquiries to:
The Director-General,
Generation Development and
Construction Division,
Central Electricity Generating Board,
Barnett Way, Barnwood,
Gloucester, GL4 7RS
Telephone: 0452 653347. Telex: 43501.

The custom-built complex at Barnwood houses one of the most experienced power station design and construction teams in Western Europe with access to the vast research and operations experience of the CEBG.

Specialisations include:
Site investigation, project evaluation,
planning, project management, budget
control, civil engineering, mechanical,
electrical and nuclear engineering, control
and instrumentation.



JACK MORAN & Co. Ltd.

PAINTING - DECORATING - SPECIAL COATING
SHOTBLASTING - DESCALING - CLEANING CONTRACTORS

Providing a complete 24-hour per day service to the Energy Industry. Painting, decorating, shotblasting, application of epoxies and special coatings, descaling, high volume vacuum cleaning, surface preparation for non-destructive-testing, general site cleaning.

All work carried out to meet the stringent standards of the CECB and their main contractors.

17 MANOR ROAD, CADDINGTON
LUTON, BEDFORDSHIRE LU1 4EE
Tel. (0582) 21331 and 37661

Drax: completion stage turbine-generators ahead of schedule

The first stage at DRAX generates 1980MW of electrical power. This 2½ million hp is the output of three NEI Parsons 660MW turbine-generators — the first machines of this rating to come into full load operation in the UK.

DRAX completion stage is also being equipped with three NEI Parsons 660MW machines — the first of which was recently synchronised one month ahead of schedule.

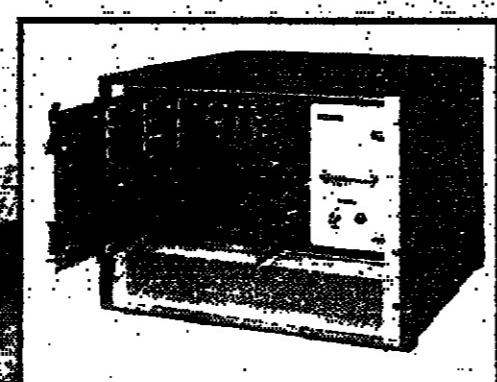


Parsons Ltd

NEI PARSONS LTD - HEATON WORKS - NEWCASTLE UPON TYNE - TELEPHONE 0632 65041

Solartron INDUSTRIAL SYSTEMS

Computer Systems
for Industrial
Data Acquisition
and Control



Solartron Industrial Systems, Victoria Road, Farnborough, Hampshire, England
Telephone: Farnborough (0252) 544333. Telex: 856245.
A Division of Schlumberger Electronics (UK) Limited

SOLARTRON
Schlumberger

DRAX II

Construction has proceeded smoothly thanks to close monitoring by the CECB

Builders meet time and cost targets

UNDERPINNING THE construction of the second phase of Drax is a return to traditional lump sum supply and erection contracts — as used in Drax Phase I — in place of the cost-reimbursable contract which became prevalent in the 1970s and which contributed to the disastrous construction performance of the Isle of Grain and Ince power stations.

Reimbursable contracts, recommended in the Wilson Committee and Large Sites reports of 1969-70, effectively heap all the risk on the owner-client, and remove incentives from contractors and the workforce to keep the project to programme.

The paper written by Mr Denis Lomax, former CECB board member, setting out the structure on which construction organisation has been arranged, makes it clear that problems of cost-reimbursable contracts are severely aggravated when the client is reluctant to exercise a strong role with contractors and through them their workforces.

This is particularly so during periods of high inflation, rocketing wage demands and growing shop steward power.

None of the 11 main supply and erect contracts and 30 other principal contracts for the second phase of Drax was cost-reimbursable. They were all lump sum contracts with price adjustment mechanisms or price for short contracts.

Within this framework, Design Phase Contracts have been used. One of the biggest drags on construction performance is plant design changes during manufacture and erection. Design phase contracts which run for 18 months and are largely used on boiler and turbine work, require contractors to do virtually all design work before manufacture.

They must also provide a range of information during the design phase which is needed by the board and other contractors to undertake design of buildings and other equipment. Such information includes size, weight and shape of equipment, dynamic forces on the foundations and the permanent water and electricity requirements to drive plant.

THE MOST pronounced achievement in the construction of the second phase of Drax is that so far it has been built to time and cost. A whole series of factors have contributed, based on the CECB's working relationships with contractors and the organisational system used to control them and tight local and national working agreements with the unions.

These have been geared to producing optimum performance from companies involved in the Drax construction, stable industrial relations and efficient patterns of working. Underlying all this has been the difficult economic climate and the background pressure of massive unemployment among con-

tractors workers which has weakened union power and dampened militancy.

Many of these features are interrelated, but it is possible to isolate these factors which apply directly to the generating board's dealings with contractors and between contractors themselves and those which relate to the role of unions and the workforce.

contractors' activities at works site which we had never enjoyed before," says Mr Elston.

The usual method of penalising construction delays is the application of damages for delayed completion. The problem with this is that it is restricted to the end of a contract. The Generating Board therefore examined ways of making "penalties" or the threat of them, effective during all stages of a contract, including plant manufacturing.

As a result, a key date procedure has been applied on major plant contracts. At regular intervals, usually every six months or so, the generating board and each contractor review how much work that contractor has achieved as against its target.

Stage payment

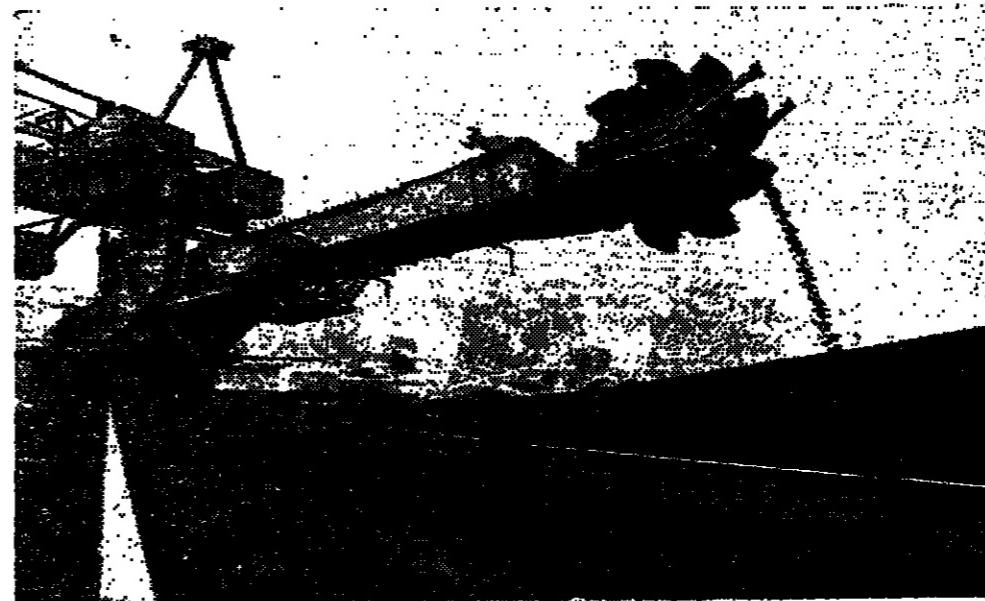
The contractor gets paid only for the work it has done but the Generating Board has also the right to withhold a stage payment — that is the monthly payment due at that time — until the contractor gets back on programme if it has slipped behind. The contractor gets paid in the end but the penalty is that in cash flow is lost.

Because senior contractor management becomes aware of unsatisfactory progress through cash flow problems caused by the withholding of payments, remedial measures can be taken by contractors when they are most effective.

Work on build programmes is very detailed. A good example is boiler construction and installation. This, as with most other build programmes is reflected in an "S" curve progression rate, with boiler construction divided into packages of work which are divided into further sub-packages.

The work programme is agreed between contractor and the CECB and fixed into a contract. This is then used to calculate to three decimal places — the actual rate of completion.

Nick Garnett



This mammoth coal-handling machine is in keeping with the size of the project

In this respect, of course, the second phase of Drax has been greatly assisted by following on from the first phase which uses very similar design and equipment. Before all this, however, the Generating Board carried out what is called a vendor assessment much deeper than it had done for previous construction projects.

This involves the visits of Generating Board employees to potential contractors to carry out a capability audit before they are included on tender lists. The assessment looks at such factors as a company's finances, managerial competence, quality and design record

and manufacturing capacity. report is prepared every year and discussed with the CECB executive. These reports, drawn up by Mr Elston, cover such issues as finance and successions, the planning of contracts and the future programme. Any identified risks to the programme are linked to action proposed or being undertaken to minimise that risk.

A crucial element has been key date procedures which were not used during Phase I of Drax. "The introduction of the key date procedure gave us a degree of control over the

Colebrand

COLEBRAND have lined all three flues in the 850 feet high chimney at Drax of some 250,000 square feet surface area, using CXL 2000 fluoroclastomer coating. This is a very considerable vote of confidence by the Management of the C.E.G.B.

CXL is flexible, acid resistant, heat resistant up to 750°F and light in weight. It is highly resistant to abrasion and is quick to apply. It also lends itself for use in the protection of ducts.

COLEBRAND is a unique organisation, carrying out research and manufacture of high performance protective coatings for use by its own application teams in the UK and Overseas to protect structures against corrosion, water infiltration, atmospheric and chemical attack on land and under the sea.

COLEBRAND LIMITED

Colebrand House

20 Warwick Street, Regent Street

London W1R 6BE

Tel: 01-439 9191 Telex: 261495

Piling for the foundation work at Drax A and B power stations by

Mowlem



Mowlem the complete building and civil engineering service.

John Mowlem & Company PLC
Asham Road, Crofton, Doncaster DN6 8DH Tel: 0302/721491

COAL HANDLING SYSTEMS

SEC

GMC Mechanical Handling Limited
Plant Division
Spurrier Works, Beaufort Road
MELKSHAM, WILTS, SN14 6AX

Telephone Melksham 0225 702750
Telex 64332

Suppliers of the new Drax wagon unloading, stocking out and reclaiming system.

DRAX III

Drax will meet a tenth of the power needs of England and Wales

Energy mainstay for years to come

SUCCESSFUL completion of the first stage of Drax B — fourth of the six 660 MW units of the entire Drax complex — "provides real life support" for the campaign to build Britain's first pressurised water reactor (PWR) at Sizewell, Suffolk, according to a top CEGB official.

This reaction typifies the uneasy balance between the nuclear and non-nuclear parts of the electricity industry and is a reminder of the difficulty encountered by Mr Tony Benn when, as Energy Secretary in 1977, he forced the CEGB to start building the second part of the giant plant at Drax.

In spite of the controversy at that time, the dooms about whether without Mr Benn's intervention prompting the Drax completion would ever have been launched, the electricity industry itself does not regard nuclear power as a full-scale replacement for coal.

In the wake of the energy crises of the 1970s, it was recognised that oil was too costly as a basic fuel for generating electricity and that thanks to Britain's coal deposits coal would remain the dominant fuel for the nation's power stations, with nuclear plants being added to ensure flexibility, reliability and economic pricing in the 1980s and beyond.

The interdependence between coal and power has been compared by a senior CEGB director to that between eggs and bacon. In 1982-83, more than 80 per cent of electricity in England and Wales was produced from coal, with the CEGB purchasing 70m tonnes, two-thirds of the National Coal Board's output.

Little more than 14 per cent of electricity in that year came from nine nuclear power stations.

Prices

According to John Baker, CEGB Board member in charge of public affairs, NEI coal accounts for nearly 35 per cent of the cost of a unit of electricity to the final user, of which half goes into miners' wages. Every 6 per cent rise in miners' pay, he adds, raises electricity prices by 1 per cent.

The CEGB's payments for coal — calculated at £90 a tonne — represent nearly three-quarters of its total fuel

CHRONOLOGY OF DRAX POWER STATION

1962	CEGB development plan includes a "Yorkshire Power Station," intended to be a 1,500 MW site with three 500 MW units to be completed between 1970 and 1976.
1964	Drax, south bank of the River Ouse, identified as the site to contain three 660 MW units.
1966	New development plan decides on the UK's first three 660 MW coal-fired units, to be commissioned between 1971 and 1973. Work authorised on site with space for six 660 MW units and six auxiliary 35 MW gas turbines.
1967	Work begins on first three 660 MW units, the so-called Drax A.
1973	First two units synchronised with the grid.
1974	Third unit synchronised. Drax A becomes operational.
1977	Tony Benn, Energy Secretary, authorises start on second half of Drax power station, 18 months earlier than originally intended.
1981	Gas turbines synchronised, two months ahead of programme.
1983	(December) Drax's fourth 660 MW unit—the first part of the Drax Completion—supplies first electricity to grid. Unit four to be fully commissioned. Units five and six to follow in 1985 and 1986.

costs and 43 per cent of its overall costs.

These figures are frequently quoted by the CEGB in support of its annual bargaining with the Coal Board about prices and the structure of their supply arrangement.

The CEGB continually points out that for power stations on

the Thames Estuary and the coast, it would be considerably cheaper to import.

It also notes that since large coal-fired power stations such as Drax have been deliberately sited close to large inland coalfields, it should not have to pay prices which help to subsidise less efficient

Big names resound among the legion of contractors

ONE OF THE Government's main reasons in June 1977 for ordering the completion of Drax power station was to provide much-needed business for Britain's faltering generating plant manufacturers, based largely in the North East.

It was a prudent move considering that the foreseeable depression to which the economic recession was to sink in the ensuing seven years.

The 120 main contracts have been awarded to 40 contractors as far apart as Renfrew in Scotland, Farnborough in Southern England, Norfolk in East Anglia, in addition to scores of companies in the industrial centres of England.

Together with their associated subcontractors, up to 1,000 companies are thought to have been involved at various stages.

The project was valued at £200m at the tender date in early 1978 (and is currently priced at about £1bn). Its biggest elements are the boilers, the civil engineering work, the turbine generators and the electrical installations.

On the basis of the original costs, the boilers were worth £200m, the civil engineering £135m, the turbines £130m, and the electrical contracts about £50m. There was also £54m worth of miscellaneous work, as well as engineering charges assessed at 3.5 per cent of the total.

On the hardware side, the contractors are led by NEI Parsons of Newcastle (the three 660 MW turbines and generators) and Babcock Power (the three boilers).

Other members of the NEI

pits kept open for "social" reasons.

But in spite of these strains between the two State-owned industries, the CEGB has no illusions about its future reliance on coal, whatever the course of Britain's economic development or whatever the result of its quest to build PWR nuclear plants.

The CEGB has a number of diverse forecasts about its requirements at the end of the century. It claims to have greatest faith in the calculation that at 70m tonnes a year, its coal burn in the year 2000 will not be all that different from today's consumption. But even its most pessimistic assumption of growth in electricity demand, entailing the burning of 60m tonnes of coal annually by power stations, would still ensure that the CEGB remained the Western world's biggest coal user.

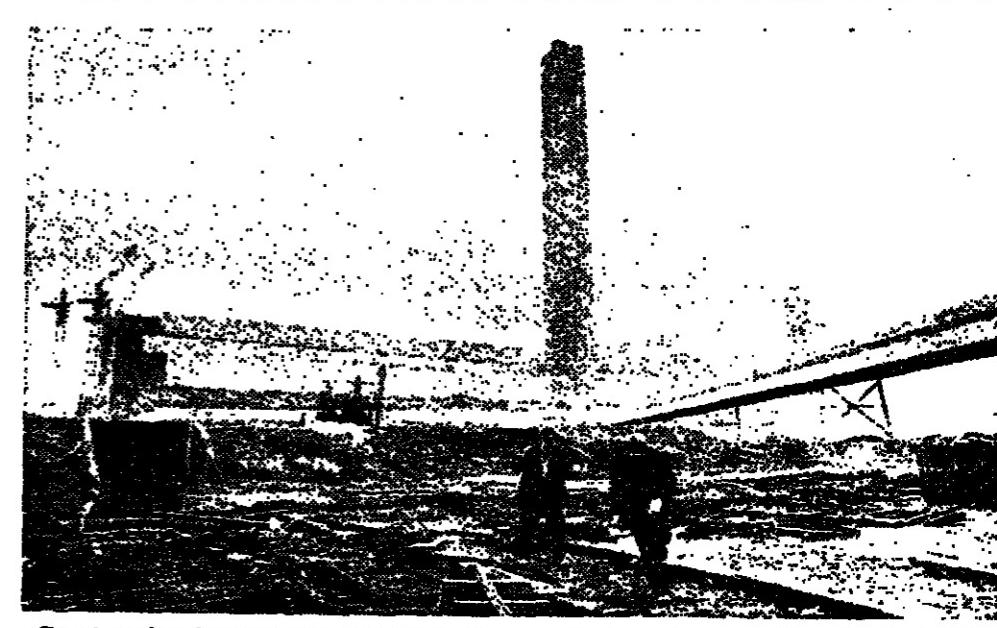
But whatever scenario turns out to be more reliable, Drax power station should still stand as one of the mainstays of the whole generating system at the beginning of the next century.

Remarkable both for its size and its expected efficiency, the completed 4,000 MW plant will be able to produce more than

a tenth of all the electricity used in England and Wales. It is one of four coal-fired plants which the Board calls the Aire Valley stations.

The others, with a combined capacity of 5,000 MW, are Eggborough, Ferrybridge and Thorpe Marsh.

CEGB officials in the North



Construction in progress: the project's second phase is currently priced at £1bn

British coal.

British Rail will deliver the coal to Drax on 1,000-tonne "merry-go-round" trains, which will unload there at the rate of 37 a day. This service will cost the CEGB about £100m a year.

The trains will bring coal from several pits in the North

East, thus helping to ensure miners' jobs in several locations. However, some CEGB officials are toying with the idea of concentrating all the Selby coal at Drax, making it one of the few large coal-field

plants in the world and further

enhancing its efficiency.

Even without this additional benefit, however, Drax already stands at what Robert Weeks, the CEGB's north east regional director, calls "the very limit of the state of the art" of building coal-fired power stations.

Drax's high performance reflects the steady improvement in the efficiency of oil as well as coal-fired stations. Since 1947, the thermal efficiency of

improved by more than half.

Maurice Samuelson

encountered by Tarmac meant that its part of the work was completed 26 weeks late. From this point on, other contractors had to perform like relay runners trying furiously to catch up.

Arrol Findlay, with 38,000 tonnes of structural steel to erect, was to have begun work on March 1 1980, and to have finished it on February 1 1983.

However, it did not gain full access until 20 weeks after its official starting date. In 1981, it had what Elston calls "a good year" and caught up seven weeks by the time the drum was hoisted onto the first boiler.

Then came the harsh winter of 1981-82 which meant that no steel could be put up for six weeks. After further acceleration in 1983 work was again interrupted by heavy rains.

The end result, nevertheless, was that over three years, the contractors cut the delay from 26 weeks to ten.

M. S.

BABCOCK POWER CREATES POWER!

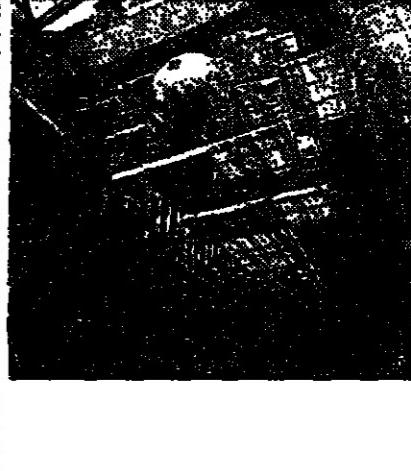
Power generation is complex. At its heart lies the conversion of nature's fuels to pure energy. At Drax, Babcock Power keeps that heart beating.

Building a power station as massive as Drax is a formidable challenge. An opportunity to show British engineering contracting at its best. Tight deadlines, tight budgets have been met by Babcock Power, through detailed planning and full co-operation with both customer and sub-contractors.

Drax is on time. No mean achievement when you are supplying three 660MW boilers, all ancillary plant, controlling a workforce of close-on 1,000 and conducting on-site testing of complex large scale power plant. All designed, manufactured and constructed to stringent quality specifications.

This typifies Babcock Power's leadership in research, development, manufacture and contracting, related to the creation of power from fossil, nuclear and waste material fuel resources.

Make Babcock Power your power for the next generation — and beyond.

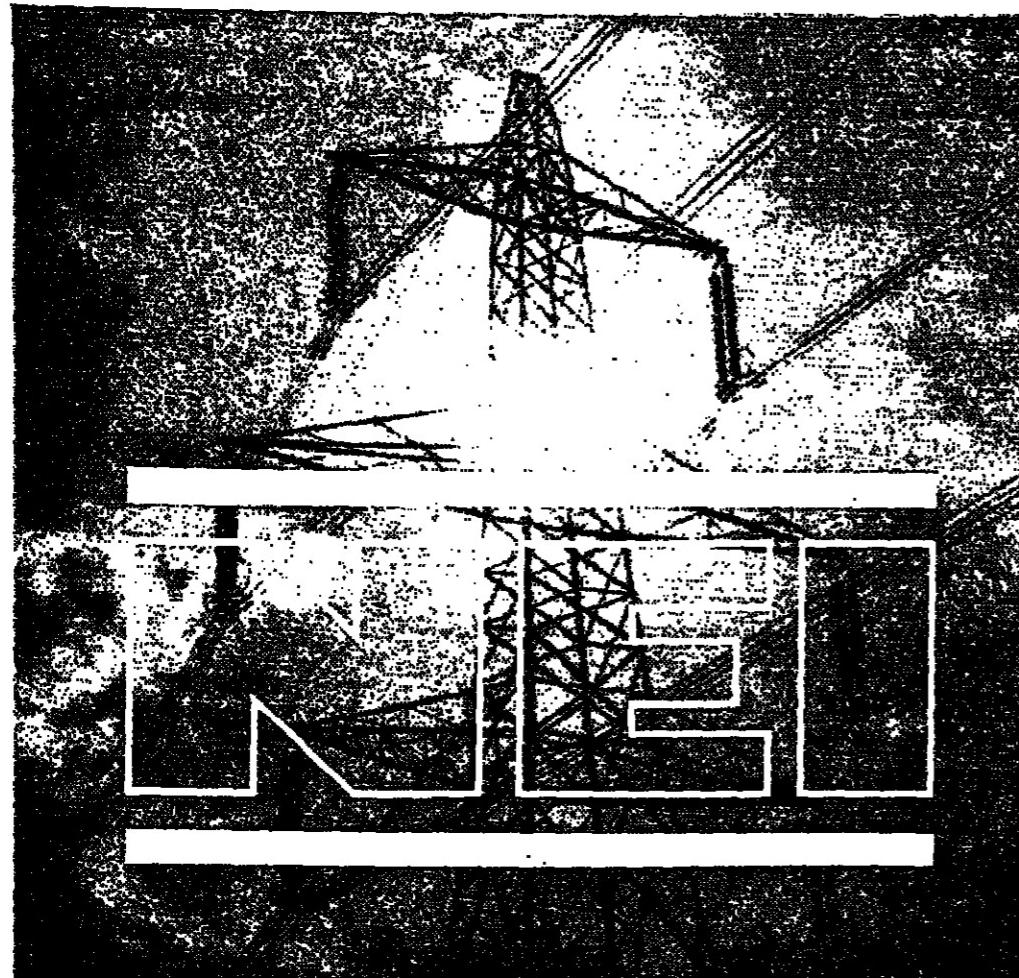


Babcock Power Limited

165 Great Dover Street, London SE1 4YB. Telephone: 01-407 8383. Telex: 884151/2/3.

LONDON · BIRMINGHAM · RENFREW

A Babcock International company



Making it in power

Making the plant for the generation, transmission and distribution of electrical power - Parsons turbine generators; International Combustion coal and ash handling plant and boilers; Nuclear Systems steam generators; Kennicott water treatment plant; Rayroll switchgear; Parsons Peebles transformers and motors; W H Allen pumps and diesel engines; Belliss & Morcom compressors; Vattek Engineering control valves; Clyde Booth and

John Boyd cranes; Sir William Arrol structural steelwork; and complete C & I Systems from NEI Electronics. Just about everything for the world's power stations, plus experienced project engineering.

NEI - leaders in power, internationally.

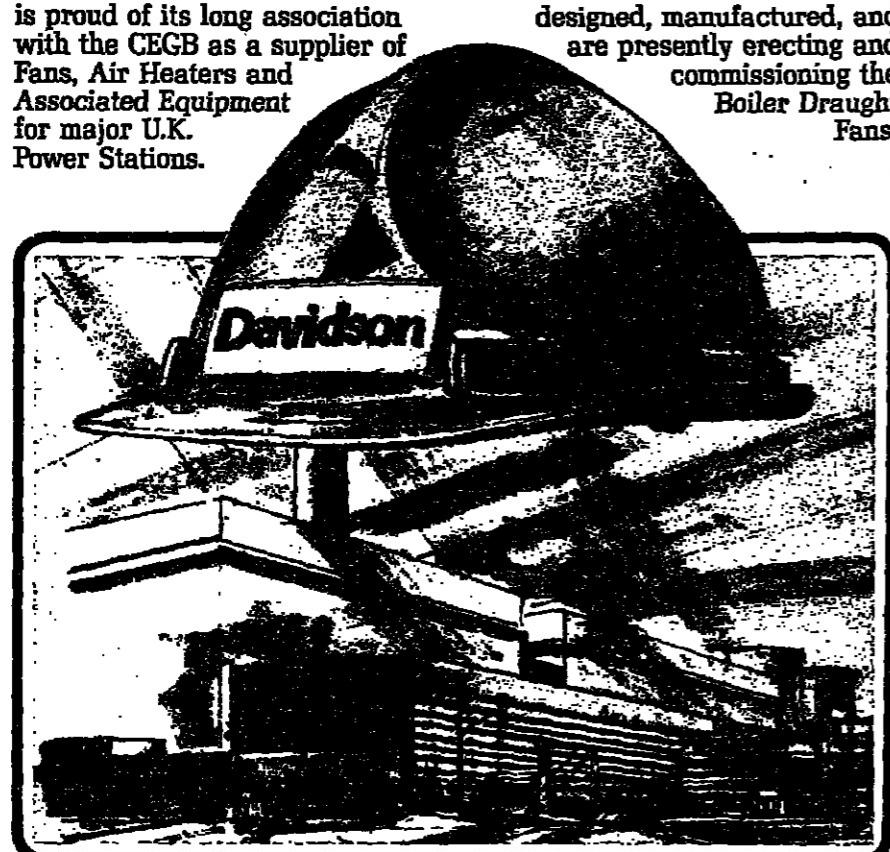
Northern Engineering Industries plc.
NEI House, Regent Centre,
Newcastle upon Tyne, England NE3 3SB.

"Being supplied for Drax completion."

DRAX MOVES AHEAD WITH...

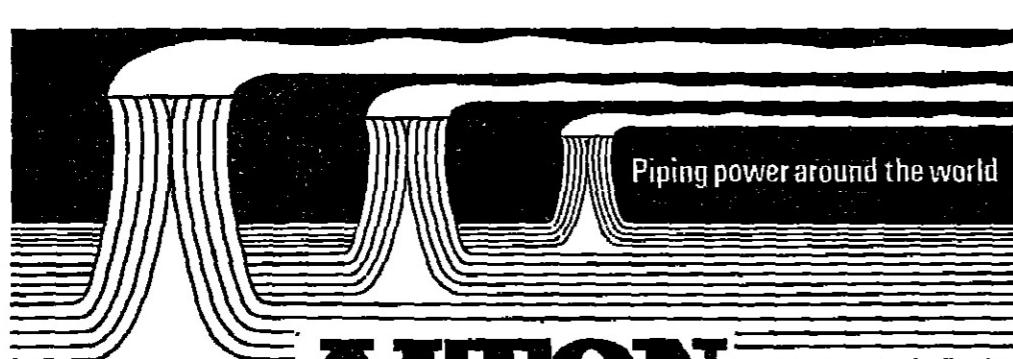
DAVIDSON & COMPANY LTD. is proud of its long association with the CEBG as a supplier of Fans, Air Heaters and Associated Equipment for major U.K. Power Stations.

For Drax Power Station we designed, manufactured, and are presently erecting and commissioning the Boiler Draught Fans.



DAVIDSON

DAVIDSON & CO. LTD.
SIROCCO ENGINEERING WORKS, BELFAST BT5 4AG.
Northern Ireland. Telephone (0232) 57251/6. Telex 74693.



AITTON

A world leader in pipework technology.

Aitton are proud to be associated with the Drax Power Station project.

On Phase 1, Aitton carried out the design, supply and installation of the High Pressure Steam and Boiler Feed Pipework.

On Phase 2, in addition to the main High Pressure Pipework Contract, Aitton were

also awarded the General Mechanical Services Contract.

Design, fabrication and installation skills developed over the last 80 years, together with recently-extended manufacturing plant, gives Aitton a facility to handle the piping requirements of the world's largest Power Stations.

Aitton & Co. Ltd., Stores Road, Derby DE2 4BG - Telephone Derby (0332) 471111, Telex 37444 - A Whosoe Group Company.

ONE OF the more unusual aspects of Drax is that reject heat from the station is used in the production of food. A joint CEGB-Express Dairy venture operates a 20-acre glasshouse producing almost 1 per cent of the tomatoes eaten in the UK.

A short distance away, RHM Agricultural Developments, part of Rank's Howies McDougal but with 25 per cent involvement from the CEGB, runs what is claimed to be the largest intensive eel farm in Europe.

Though this latter venture has struggled with some technical difficulties and is operating below expected capacity, it has now just about reached trading break-even.

The CEGB carried out a series of trials at the Egborough power station between 1971 and 1978 to test the use of waste heat from cooling water for horticultural crop production.

The generating board and Express Dairy, which had also been investigating energy conversion, initially invested £250,000 in 1978 for a pilot horticultural scheme at Drax and a year later a joint company, Excel Produce was set up. Express Dairy taking 51 per cent and the generating board 49 per cent. Express Dairy also purchased a 105-acre farm adjacent to Drax in anticipation of the trial's success.

Excel now incorporates a massive 20-acre glasshouse claimed to be the second largest in Europe, producing 2,300 tons of tomatoes a year, as part of the £5m joint venture.

The heating system uses condenser cooling water from the power station which is drawn off before it reaches the cooling towers and pumped to the glasshouse through 48-inch diameter underground pipes which at peak take a daily flow of 20m gallons. The water, after passing through heat exchangers where the heat is extracted as warm air, is then returned to the cooling towers.

The company calculates that a conventional 20-acre oil-heated glasshouse in the UK would require just under 1m gallons of fuel oil per year, costing £240,000 at 1981 prices. The Excel glasshouse costs about half that to run.

Flow

The best exchangers are computer-controlled to maintain air temperature in the glasshouse's separate sections. This is done by the phased operation of the pumps and fans which regulate the flow of condenser cooling water and air distribution.

There is a central computer controlling dosage of the growing medium, acidity, environment and other factors using a software package specially specified by Excel.

Employment varies between 30 and 100, depending on the season. Most of the staff were recruited when recruited but the company offers training in horticulture.

A pilot plant with four small ponds was commissioned and last year of \$1.8m and makes a trading profit after depreciation. A trading profit after depreciation developments was formed with £750,000 capital split 75 per cent, 25 per cent between RHM and the generating board. In 1979 the first stocking of elvers was begun.

Again, the eel farm takes



Above: tending tomatoes in the extensive glasshouses. Heat exchangers through which the waste hot water flows are computer-controlled to maintain the correct temperature. Right: sorting eels for size at the eel farm. The young eels are kept in indoor tanks for a year then transferred to the outdoor lagoons



substantial reduction in imported produce.

The company has a long-range plan to quadruple the glasshouse acreage to 80 acres. For adult eels the water drains through the lagoons, runs over weir boards into a drainage channel and then into a pumping sump from where it is pumped back to the station. Immature stock which are kept in smaller indoor tanks have a separate water system.

Target

The warm water greatly aids productivity because it allows the eels to be active right through the year and a water temperature higher than that found naturally in the UK is much closer to the ideal for rearing them.

From a first-year output of five tonnes, yearly sales have now reached 130 tonnes. That means three quarters of a million eels and a turnover last year of £405,000.

The planned target and the plant's design capacity however was 200 tonnes. The biggest problem has been the water temperature. The generating board expected the water to be at 30 deg C as against an optimum growth temperature of 28 deg C. However, the water is hotter than envisaged and can be as high as 44 deg C. At that temperature water has less oxygen so can sustain less life and it also reduces growth rate.

Mr David Evans, managing director of Agricultural Developments, says the only way to raise tonnage is to try to reduce the temperature down or build more lagoons. The source of the elvers or the company's sales contacts are

two issues which the company has had to develop and has done so successfully. "We could sell for more than we produce," Mr Evans says.

European eels breed in the Sargasso Sea and take three years to swim to Europe where they congregate on the Continental Shelf once a year. The spring tide brings them into Britain through a number of inlets, the main one being the Severn Estuary. The company buys the elvers or "glass eels", which at that point weigh a third of a gram each, from fishermen.

The elvers are kept in the indoor tanks for a year during which their weight rises to 10 grams. They are then transferred as adult eels to the outdoor lagoons where they are kept for a further year where, fed on a modified commercial

Nick Garnett

FSW are a major supplier to CEBG Drax Power Station



FSW also supply Bulk Materials Handling Equipment to the Coal, Steel, Power Generation, Cement, Process and Extractive Industries.

FSW FLETCHER SUTCLIFFE LTD.
Horbury, Wakefield, W Yorks WF4 5HJ.
Telephone 0924 27 6300.
Telex 587372.

Member of The
Assocon Partnership Group

Electrical Installation Engineers to the Central Electricity Generating Board at Drax Power Station since 1965

TWB T.W. Broadbent Ltd.,
Newland Works, Kirkheaton, Huddersfield HD9 5JY.
Tel: 0484 25871. Telex 517375.

MANUFACTURERS OF FAUCET GLOBES AND CONTROL PANELS INSTRUMENTATION/ENGINEERS



If you would like to benefit from Lowe's experience and expertise ask your Secretary to contact us for our Sampling Equipment Brochure.

LOWE George E. Lowe
Engineering Limited, Kirkheaton, Huddersfield HD9 5JY.
Telephone 0484 333363. Telex 587563.

N. G.

Drax V

The design of future coal-fired stations will be tightened up to cut sulphur emissions

EEC increases pressure on acid rain

DRAX POWER station seems certain to be the last of its kind. It will probably be the last coal-fired power station built in Britain without waste-gas desulphurisation equipment.

A strong hint that this could be so came in the last annual report for 1981 of the Alkali and Clean Air Inspectorate.

At the end of a section on pollution by sulphur dioxide which reviewed rising European concern about the possible contribution of acid rain to the problem, and again in the report conclusion: "The power of the legislature stems from legislation intended to protect the population and environment of England and Wales and it is unlikely that action could be taken under the legislation in order solely to protect the environment in other countries."

However, the first duty of the Inspectorate is to prevent emissions to air where it is practicable to do so irrespective of whether damage is caused.

In the UK there are currently no proposals for new fossil fuel generating plants,

but if and when they come forward, the scope for preventing or reducing emissions of sulphur dioxide will need to be considered positively in the light of experience now being gained in other countries."

By the time the inspector wrote that wordy passage, of course, Drax was well on the way to completion. Its design specifications were complete by 1977, which was well before the acid rain debate shifted from being an isolated patch of scientific and pressure group dispute to becoming a full-scale political battleground.

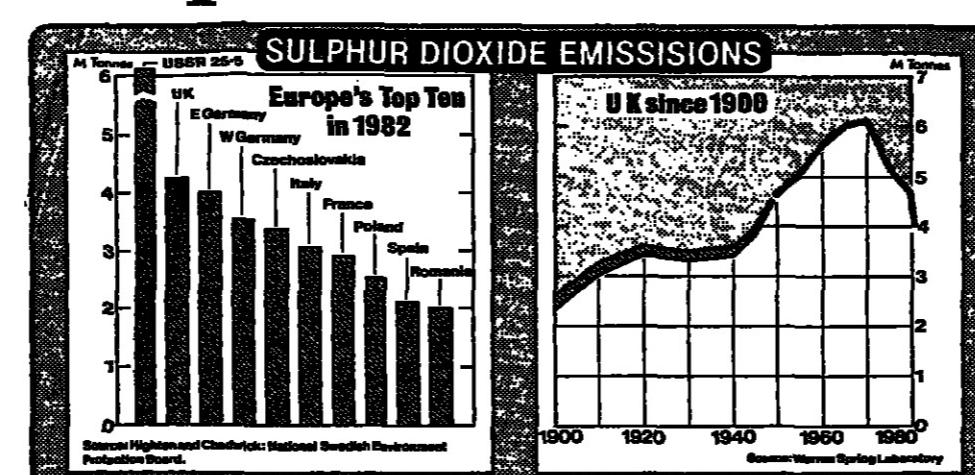
The most recent and potentially most far-reaching result of that change was the publication this month of a draft EEC directive, which would require member states to cut their output of sulphur dioxide by 60 per cent; of oxides of nitrogen by 40 per cent and of dust by 40 per cent—all by the year 1985. In addition, the directive sets specific emission limits for new fossil fuel power plants of 400 milligrams per cubic metre of waste gas in the case of sulphur dioxide, falling to

Washed out

The British Government and CEGB find themselves with an undesired central role in these events because, as the table shows, Britain is a very large producer of sulphur dioxide. This chemical, when released into the atmosphere, carried by wind and then washed out as rain or mist, is believed to cause acid rain and more political tension, especially in Germany and Scandinavia, to be a prime cause of acid rain. This, in turn, is argued to be a prime cause of the dying forests and, in the case of Scandinavia, the dying or dead lakes and streams.

Not surprisingly, both the Government and the industry have responded with a mixture of caution and anxiety towards this state of affairs. They argue, with considerable evidence on their side, that the connection between the malaise of the forests and lakes and acid rain is far from proven and that even if it were to be accepted as a working hypothesis there are strong grounds for believing that even a large reduction in power station pollutants would not cure the scale of the political threat.

"I think that the politics demands some action. The expectation from the politicians and the public is that something is going to be done and I think



that ultimately something will be done," says Mr John Clarke, head of environmental services at the CEGB, expressing a personal view.

Just what will be done depends most of all upon the progress of the commission's draft directive.

From the British point of view, any numbers at all will represent change, since the present law in the UK merely requires that the alkali inspec-

tor determine "the best practicable means" of pursuing its goals of controlling air pollution. There are no general numerical targets, either for old plant or new.

hours on the other side of the Channel and the North Sea. The Drax design reflects this regime.

Burden

If the rules are tightened, however, one thing is certain: it will cost the CEGB, the taxpayer or the electricity consumer a lot of money.

If the CEGB is obliged to carry the entire burden of re-

duce the nation's sulphur dioxide and nitrogen oxides emissions to within the proposed EEC limits, the board's rough estimate is that it would cost £2bn and add 10 to 15 per cent to the operating costs of the power stations. And if the entire cost were loaded upon the price of electricity, bills would rise by about 7 per cent.

This would involve fitting flue-gas desulphurisation scrubbers to the chimney stacks of the plants, modifying the plants' boilers so as to burn more of the nitrogen oxides produced when coal and fuel oil are burned, and increasing the size of the dust collectors, which use electrostatic plates to filter out particles of soot.

The expensive part is the scrubber, which would cost £11m just for the second stage of Drax—twice that for the entire installation. Drax's running costs would rise by about £50m a year—mainly the cost of collecting and disposing of the pollutants removed from the gas.

It was this problem of how to dispose of the pollutants which, curiously enough, finished off the last British experiment with flue-gas desulphurisation in the late 1960s when the scrubbers at the famous, but now defunct Battersea power station in London had to be closed down because water from the gas-washing plant was causing a serious pollution problem in the Thames.

At their peak, Battersea's scrubbers—which forced the waste gas through jets of water and chalk in suspension, culled 90 per cent of the sulphur from the emissions—a creditable standard even for the more modern scrubbers used today in Japan and West Germany.

Another way of reducing the amount of sulphur in power station waste is to wash the coal before it is burned—an option which the CEGB is currently exploring with the National Coal Board, although that in turn raises the difficult question of who should pay for the washing.

Digital control and Cutlass vital features at Drax will be of great utility throughout CEGB. It is estimated that Cutlass will reduce the manpower needs of control refurbishment schemes by some 240 man-years.

Geoff Charlish

Ian Hargreaves

Congratulations to the C.E.G.B.
Drax Power Station
on Time and Within Budget

N. G. BAILEY & CO. LTD.
Electrical and Instrumentation
Engineers and Contractors

Major Projects Division
Cutler Heights Lane
Bradford BD4 9JF
Tel. 0274 682856
Telex. 517293 Bailey G

HOWDEN

James Howden & Company Limited are proud to be involved, with Babcock Power, in the Drax Power Station project. We were chosen to supply six Howden rotary regenerative air preheaters for this project to add to the 17,834 Ljungstrom air preheaters already installed throughout the world.



195 Scotland Street, Glasgow G5 8PJ.
Telephone: 041-429 2131 Telex: 77439.

Digital control of boilers gives more flexibility

Micros taking over to match demand

CONTROL OF up to 2000 MW of electrical power—enough to run 10 two-burner electric fires—from the three big turbines alternators in the second, completion phase of Drax has been entrusted to the microprocessor.

It is one of the first examples of direct digital control by microprocessors of a large-scale steam-raising plant.

Ten years ago, when the micro-processor was known only to leading edge workers in the semi-conductor business, power engineers would have balked at the idea of "software and chips" controlling 200 ft tall boilers and massive coal silos.

But times have changed. The nuclear stations, which are able to produce electricity more cheaply, are today used preferentially to meet the basic consumer demand—the "base load". Inside the coal-fired stations we see switches on and off the grid as the demand rises and falls through the day and night.

Other demands can occur in ways that seem peculiar but are now familiar to control centre engineers. For example, at the end of the Royal Wedding in July 1981 when Prince Charles and Lady Diana left Waterloo Station, demand rose in a few minutes by nearly 2,000MW (the whole output of Drax) as millions of viewers went to their kitchens to brew tea with electric kettles. Cold snaps in the weather have similar, if slower-acting, effects.

The result of all this is that large coal-fired stations like Drax, which at one time ran at their rated outputs most of the time, nowadays must be either partially or fully started up or shut down at short notice. That implies cost-effective, flexible control systems, which is where the micro-processor comes in, together with specially tailored software.

The controlled parameters include feedwater levels and flows, combustion air, superheater and re-heater steam temperatures and individual control of the 10 coal mills.

Some 2,000 variable and alarm states are shown in a wide variety of formats, on colour "television" displays at the station's control desks, with push-button call-up of text, numeric and graphical data, and plant mimic diagrams.

There are 18 micro-processors on each boiler unit, eight for direct boiler control and 10 for start-up and shut-down. LSI 11/23 processors from Digital Equipment Company (DEC) have been used and the software for direct control has been written in the CEB's own high level computer language called Cutlass.

Work on Cutlass (it stands for Computer Users' Technical Languages and Application Software System) began at CEGB research centres when it was concluded that power engineers needed, first, a control system programming language that was independent of the computer used; second, one tailored to their particular engineering needs; and third, one that used a computer and gave knowledge of computers or programming.

Cutlass allows engineers working in specific areas of power station control to perfect their programs and integrate them on a time-slot basis for overall control of the plant. The main areas are sequence control for start up and shut down, DDC, increase or decrease plant variables, and graphical text generation for the display computer.

The difference, known as the "error signal," is applied to the equipment controlling the coal pulverising mills or the fans that move the coal dust down feed pipes thus increasing the burning rate in the boilers. The pressure rises, the error signal is reduced and the action continues until it falls to zero when the plant will then be producing the new, higher output.

For many years control engineers used "analogue" control signals—that is, voltage or current levels, AC or

DC—that were a measure of the quantities involved, such as pressure, temperature and flow rate.

When small computers of high enough reliability and low enough cost began to appear in the 1970s, digital control became feasible, in which the control voltages and current levels were replaced by strings of on/off pulses coded (rather like Morse code) to represent plant values.

The essential aspect of direct digital control (DDC) is that the control action is vested in software—the programs of the computer—rather than in the steel and copper of mechanical and electrical hardware, and so can be changed simply by running a different program.

Needed

A few years ago the micro-processor became so cheap, powerful and compact that engineers decided to use them where they were needed around the plant rather than depend, as in earlier systems, on one large central computer. Then, a computer fault does not cripple the whole, or a large part, of the station.

Thus in 1981, contracts worth about £5.7m were placed by the CEGB. Two worth about £3.7m were awarded to Solartron Schlumberger for data collection and monitoring systems and two others totalling £2m went to Babcock Bristol for control equipment.

The controlled parameters include feedwater levels and flows, combustion air, superheater and re-heater steam temperatures and individual control of the 10 coal mills.

Some 2,000 variable and alarm states are shown in a wide variety of formats, on colour "television" displays at the station's control desks, with push-button call-up of text, numeric and graphical data, and plant mimic diagrams.

There are 18 micro-processors on each boiler unit, eight for direct boiler control and 10 for start-up and shut-down. LSI 11/23 processors from Digital Equipment Company (DEC) have been used and the software for direct control has been written in the CEB's own high level computer language called Cutlass.

Work on Cutlass (it stands for Computer Users' Technical Languages and Application Software System) began at CEGB research centres when it was concluded that power engineers needed, first, a control system programming language that was independent of the computer used; second, one tailored to their particular engineering needs; and third, one that used a computer and gave knowledge of computers or programming.

Cutlass allows engineers working in specific areas of power station control to perfect their programs and integrate them on a time-slot basis for overall control of the plant. The main areas are sequence control for start up and shut down, DDC, increase or decrease plant variables, and graphical text generation for the display computer.

The difference, known as the "error signal," is applied to the equipment controlling the coal pulverising mills or the fans that move the coal dust down feed pipes thus increasing the burning rate in the boilers. The pressure rises, the error signal is reduced and the action continues until it falls to zero when the plant will then be producing the new, higher output.

For many years control engineers used "analogue" control signals—that is, voltage or current levels, AC or

Complex

Power station control is fairly straightforward in principle but complex in practice. If the coal falls for more power, either a station has to be started up, a complex procedure involving perhaps 1,000 steps, or stations running below maximum or on "spinning reserve" have to generate more power.

If the generator (a steam turbine-driven alternator the size of a small railway station) has to produce more output, more steam pressure must be raised, calling in turn for more coal to be pulverised and blown into the burners to make more heat.

As soon as the demand is made by control centre engineers, an electronic signal representing the desired steam pressure, which is continuously produced by the station's control system, will rise in sympathy. In so doing, it will immediately exceed another signal representing the measured pressure.

The difference, known as the "error signal," is applied to the equipment controlling the coal pulverising mills or the fans that move the coal dust down feed pipes thus increasing the burning rate in the boilers. The pressure rises, the error signal is reduced and the action continues until it falls to zero when the plant will then be producing the new, higher output.

For many years control engineers used "analogue" control signals—that is, voltage or current levels, AC or

DC—that were a measure of the quantities involved, such as pressure, temperature and flow rate.

When small computers of high enough reliability and low enough cost began to appear in the 1970s, digital control became feasible, in which the control action is vested in software—the programs of the computer—rather than in the steel and copper of mechanical and electrical hardware, and so can be changed simply by running a different program.

Cutlass allows engineers working in specific areas of power station control to perfect their programs and integrate them on a time-slot basis for overall control of the plant. The main areas are sequence control for start up and shut down, DDC, increase or decrease plant variables, and graphical text generation for the display computer.

The difference, known as the "error signal," is applied to the equipment controlling the coal pulverising mills or the fans that move the coal dust down feed pipes thus increasing the burning rate in the boilers. The pressure rises, the error signal is reduced and the action continues until it falls to zero when the plant will then be producing the new, higher output.

For many years control engineers used "analogue" control signals—that is, voltage or current levels, AC or

DC—that were a measure of the quantities involved, such as pressure, temperature and flow rate.

When small computers of high enough reliability and low enough cost began to appear in the 1970s, digital control became feasible, in which the control action is vested in software—the programs of the computer—rather than in the steel and copper of mechanical and electrical hardware, and so can be changed simply by running a different program.

Cutlass allows engineers working in specific areas of power station control to perfect their programs and integrate them on a time-slot basis for overall control of the plant. The main areas are sequence control for start up and shut down, DDC, increase or decrease plant variables, and graphical text generation for the display computer.

The difference, known as the "error signal," is applied to the equipment controlling the coal pulverising mills or the fans that move the coal dust down feed pipes thus increasing the burning rate in the boilers. The pressure rises, the error signal is reduced and the action continues until it falls to zero when the plant will then be producing the new, higher output.

For many years control engineers used "analogue" control signals—that is, voltage or current levels, AC or

DC—that were a measure of the quantities involved, such as pressure, temperature and flow rate.

When small computers of high enough reliability and low enough cost began to appear in the 1970s, digital control became feasible, in which the control action is vested in software—the programs of the computer—rather than in the steel and copper of mechanical and electrical hardware, and so can be changed simply by running a different program.

Cutlass allows engineers working in specific areas of power station control to perfect their programs and integrate them on a time-slot basis for overall control of the plant. The main areas are sequence control for start up and shut down, DDC, increase or decrease plant variables, and graphical text generation for the display computer.

The difference, known as the "error signal," is applied to the equipment controlling the coal pulverising mills or the fans that move the coal dust down feed pipes thus increasing the burning rate in the boilers. The pressure rises, the error signal is reduced and the action continues until it falls to zero when the plant will then be producing the new, higher output.

For many years control engineers used "analogue" control signals—that is, voltage or current levels, AC or

DC—that were a measure of the quantities involved, such as pressure, temperature and flow rate.

When small computers of high enough reliability and low enough cost began to appear in the 1970s, digital control became feasible, in which the control action is vested in software—the programs of the computer—rather than in the steel and copper of mechanical and electrical hardware, and so can be changed simply by running a different program.

Cutlass allows engineers working in specific areas of power station control to perfect their programs and integrate them on a time-slot basis for overall control of the plant. The main areas are sequence control for start up and shut down, DDC, increase or decrease plant variables, and graphical text generation for the display computer.

The difference, known as the "error signal," is applied to the equipment controlling the coal pulverising mills or the fans that move the coal dust down feed pipes thus increasing the burning rate in the boilers. The pressure rises, the error signal is reduced and the action continues until it falls to zero when the plant will then be producing the new, higher output.

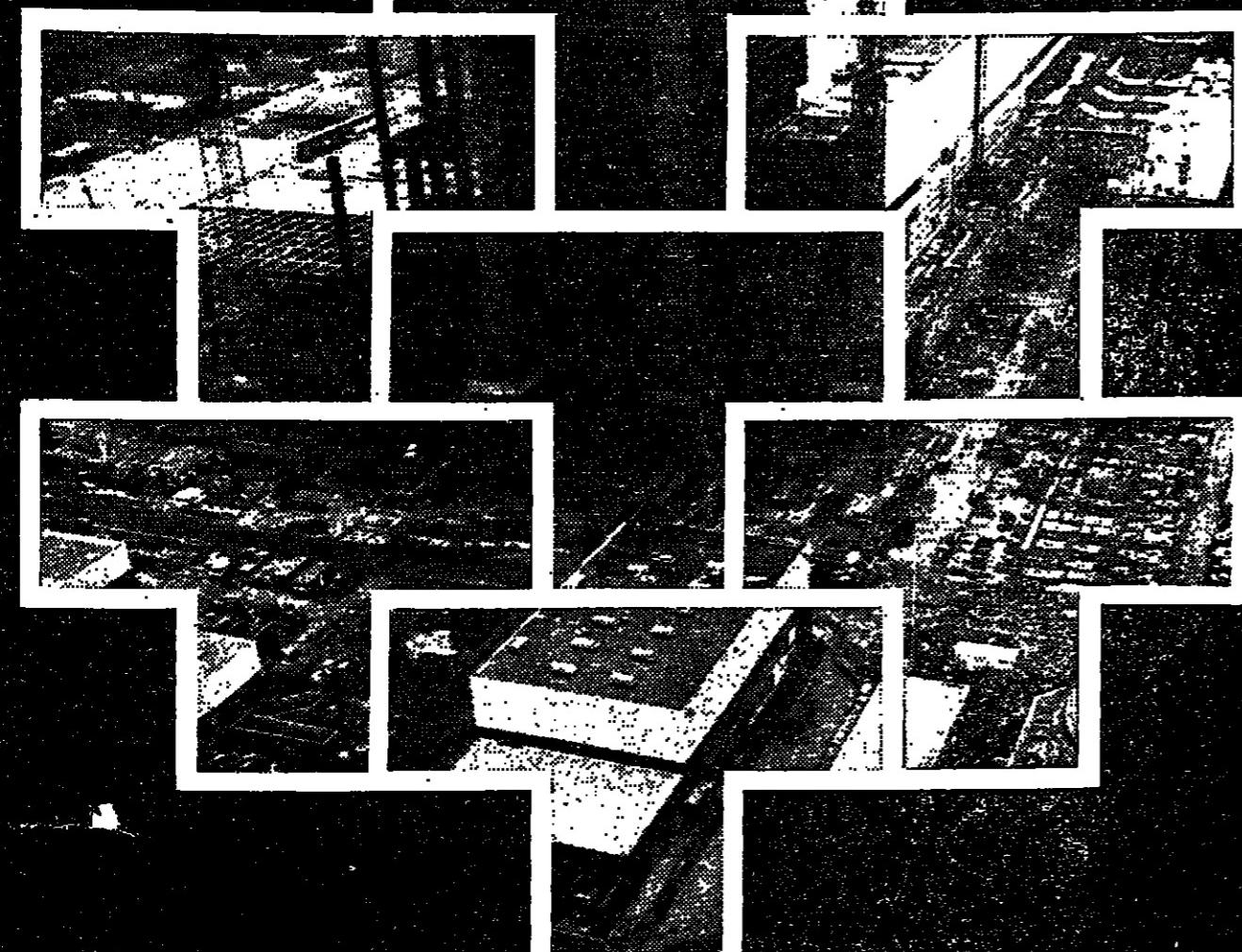
For many years control engineers used "analogue" control signals—that is, voltage or current levels, AC or

DC—that were a

DRAX VI

Drax is proving a showcase for workers' and management talents

Benefits for workforce as project's success grows



Construction at its best.

Foundations and civil works for Drax Power Station Completion.

Tarmac Construction Limited, Construction House, Birch Street, Wolverhampton WV1 4HY
Telephone: 0902 22431. Telex: 336057

PROVIDING POWER FOR THE NATION

We build banks and breweries, churches and chimneys, mines and motorways. Restaurants and reservoirs too. And town centres.

Actually, we build almost everything, from A to Z... including P for power stations, like Drax.

So we are especially proud to be associated with the successful completion of an important phase of this project, which takes the Central Electricity Generating Board a step closer to operating the largest coal-fired power station in Europe—able of providing about 11 per cent of the nation's

has been to carry out all the major building engineering superstructure work for the main office block, the large external sub-station and many buildings. We were also responsible for culverts and connecting water and cooling towers.

Completed on or ahead of time, and to standards—standards that have made McAlpine what it is today

d McAlpine
on Limited
ark of Quality

7ND Telephone: 051-339 4141 Telex: 627185

BOTH THE contractors and the workforce are hoping to benefit from the progress of Drax as a model construction site and the last word in coal-fired power stations.

A union official on the site's joint management committee confirmed earlier this month that men being laid off as the steel construction contract slowed down were being surprisingly successful in finding new work in the North East in view of the industrial recession.

Jack Elston, the CEBG's manager of the project, describes the men as "a well motivated and self-disciplined labour force already used to building power stations."

Some 75 per cent of the Drax labour force, which at its peak last spring numbered 1,000, was recruited in the North East. It included 20 men accommodated with their families in special caravans, and whose children attended the local village school.

Subsidiary
Another 350 unattached men are accommodated in the main construction camp nearby, run by ARA, the UK subsidiary of the U.S.-based industrial catering empire which will be in charge of the

catering at the forthcoming Los Angeles Olympics. (Its UK leisure division caters at Wembley Stadium in London.)

Entertainment facilities

in the recreation building at Drax include snooker, table tennis and video players with hired cassettes. The nearest town for an outing is Selby, a few miles away, which sits on top of the super-pit which will supply much of Drax's requirements.

The Drax completion is

also proving to be a show



Inside the boiler house. The skill with which initial delays at the site were overcome has attracted attention from electricity authorities overseas.

case for overseas power utilities, who have been sending a constant stream of people to inspect it.

Among the visitors in January were a team of vice-presidents of U.S. utilities belonging to the American Round Table business organisation.

Their interest is more than casual, since the management plan which the CEBG used for controlling the work at Drax was inspired by a major study which the Round Table carried out into the short-

comings of the U.S. construction industry.

In the past year, there were also three visits by the Indian electricity authorities connected with the coal-fired power station being built at Rihand, India, with British assistance.

Inspect

The Dutch electricity authorities also came to Drax to inspect the 100 tonnes of dust a year are being worked into a landscape site a mile away.

On the other hand, when a team of Japanese officials from Mitsubishi arrived last summer, they seemed more intent on selling to the CEBG than learning from it. With an eye on the international concern over acid rain and sulphur dioxide emissions, they gave the CEBG a presentation about Mitsubishi's equipment for the clean scrubbing of emissions from fossil-fuel power stations.

The CEBG is not yet in the market for such equipment so the Japanese left empty-handed. In fact, however, a CEBG official was left with the impression that Japanese manufacturers are far ahead of British industry in this potentially large market. British manufacturers, on the other hand, claim that once the market develops, they will be able to enter it with very little delay.

Maurice Samuelson

Projects are running out as UK construction programme dwindles

Expertise being offered abroad

THE CONSUMING problem facing the Generation Development and Construction Division is not a technical one, but the simple fact that its work is running out.

Within a year its only power station construction operations in England will be completion of the final phase of Drax, due to be finished in the middle of 1986, and on Heysham II, due to be completed the following year.

Even if building of the Sizewell B nuclear pressurised water reactor station eventually goes on until 1987, the division's 1,000 workforce will have to be cut substantially. If Sizewell B does not go ahead Mr John Collier, the division's director, says employment will shrink by more than

half. That position would be a far cry from 1971 when the division was set up and geared to building one power station a year. When the division moved to its existing office site, at Barnwood near Gloucester, ten years ago, its 2,100 staff were handling ten major projects, seven at peak construction life.

Now, Heysham I, Hartlepool and Dungeness, all advanced gas-cooled reactor nuclear stations, are at the construction stage, together with the last units of the Dinorwic station in Wales. Littlebrook D has now become fully operational and there is only one unit out of the four at the Isle of Grain oil-fired station to be completed.

Peak
One of Mr Collier's tasks is to try to attract new forms of work for the division by, for example, encouraging British contractors and foreign power station owners, to use the division's expertise in project management and construction.

Other forms of work that might open up include combined power and heat supply stations near cities, a subject on which the Government has yet to make a formal decision, and conversion of oil stations to coal.

The division's senior management sees part of its job as trying to make sure that the division keeps its expertise intact before the next major series of power station constructions, which the Central Electricity Generating Board (CEGB) expects, actually begins.

Some of the later power stations built by the division will come to the end of their life in less than 25 years from now, but the division says it would be harmful not to have a gradual construction programme rather than a concentrated build effort.

Some contractors need to know the implications of that design on their own work.

Barnwood also carries out design work on a whole series of systems including piping, heating and ventilating.

About a tenth of the division's activities are taken up by

design, modification and other

work on plant that is already

operating even though the five

regions have their own engi-

neering capability.

The division has some

limited consultancy work

abroad. This includes a full

consultancy for the construction

of the Ruhand coal-fired station

in India for which it is assisting

both the Indian Government

and Northern Engineering Indus-

tries.

It is also providing assistance

in the construction of peak B in Hon-

Chia Light and

company and on a number of projects in Australia.

N. G. Garnett

More than £1,000,000 saving by using PFA Concrete at Drax!

Have you found out what PFA can do for you?

there is a lot more to it than you may think

PFA
Ash Marketing-CEGB,
Walton House,
24 Castle Place,
London EC1V 9ER.
Tel: 01-548 1282 Ext. 4037.
(Change to 01-634 5662 during 1984)
Telex: 863141.

N. G.